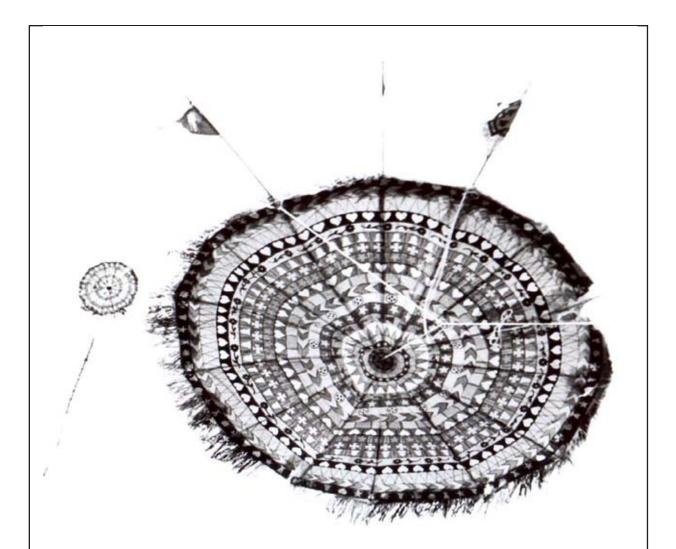
K I F E THE DRACHEN FOUNDATION J O U R N A L



The Giant Kites of Guatemala

Up to 40 feet wide, the barriletes gigantes of Guatemala are flown annually on the lst of November to honor the dead. Tens of thousands of people turn out to view the spectacle at two villages in the Guatemalan highlands and to marvel at the beauty of these unique, ephemeral tissue paper creations, among the most wonderful objects in the world of kiting. Page 3.

OUR CONTRIBUTORS

Masaaki Modegi, a restaurateur in Tokyo, is well known as an ambassador for kites worldwide. He maintains the Tokyo Kite Museum whose collection, begun by his late father Shingo, he has substantially enlarged over the last several de-



cades. An excerpt from his published account of early kites and kitemakers in Japan appears on Page 33.

At age 95, Ed Grauel, of Rochester, New York,



remains a wonder—a living national treasure of kiting. The world's leading authority on kite patents, Grauel remains busy designing, making, flying, and writing about kites. Grauel for many years conducted scientific

experiments with kites and the meticulous research papers that resulted are being systematically published for the first time in this journal (Page 43).

Martin Fils Barthold, of Colorado Springs, Colorado, was born in Haiti. For the past two years he has been working as a professional dancer and teacher in the U.S. He is also a published poet. In a remi-

niscence about his boyhood, Barthold tells about the joys of flying fighter kites from the rooftops of his home city, Port au Prince. His accompanying poem is receiving its first publication in this journal. Page 26.



two of the best books on kites ever published in English, *The Art of the Japanese Kite* and *A Kite Journey through India*. A professor of art at the State University of New York, at Purchase, he is the designer and maker of large scale sculptures



and kites and for decades has been collecting kites, with a heavy concentration on Asia. His thoughts on preeminent 20th century American kite inventors is on Page 37.

THE JOURNAL STAFF

Editor and major contributor to the Drachen Journal, well traveled **Ben Ruhe** regularly contributes articles to special interest publications on subjects as diverse as boomerangs, tribal art and flint-knapping.





Scott Skinner, president of the Drachen Foundation, is a former pilot instructor at the U.S. Air Force Academy. He has been a kite enthusiast for two decades– designing, making, flying, collecting, and teaching about kites.

Ali Fujino is the administrator of Drachen. A museum specialist since age 19 when she began work at the Smithsonian Institution, she has long been fascinated with anything that can become airborne.



Tal Streeter, of Verbank, New York, has written

The Drachen Foundation: Kite Archives, Science and Culture

The Drachen Foundation is devoted to the increase and diffusion of knowledge about kites worldwide. A 501(c)(3) private nonprofit corporation, Drachen views kites from the standpoint of art, culture, science and history. It uses an integrated program of exhibitions, education, research, collections management, and publications to promote learning about kites. The archive it maintains is freely open to the public for research. STUDY CENTER LOCATION 1905 Queen Anne Avenue North / 200 Seattle, Washington 98109-2500 U.S.A.

> **OFFICE HOURS** Monday–Friday 9 a.m.–5 p.m.

RESEARCH LIBRARY By appointment only: (206) 282-4349

The Giant Kites of Guatemala 'Stained Glass Windows in the Sky'

By Ali Fujino and Ben Ruhe

The giant kites of Guatemala—*barriletes gigantes*, as they are called in Spanish-are amazing when viewed either in flight or up close. Up to 40 feet across, the circular kites are flown on the Day of the Dead-the lst of November-in just two Mayan Indian villages near the capital, Guatemala City. Why there and nowhere else, no one is able to say, since credible historical documentation is in short supply, although this ritual kite flying is clearly a very old tradition. The kites honor the deceased, their flight expressing affection, respect, awe; the annual rite also counteracts evil spirits that may be hovering in the sky. Via low key images and messages on the sails, the kites express the makers' pride in their Mayan Indian heritage. This is a matter of political consequence in a country long wracked by an ethnic civil war, but now, finally, peaceful again, and full of smiles for visitors.

Because they are made of tissue paper in rainbow colors, the kites when flown with the sun shining through them glow and sparkle. Their ruffles twirl and their hummers sound. They are lively "stained glass windows in the sky," as has been remarked of them, a kind of aerial Chartres. To view these kites being flown by enthusiastic young Indians is a delightful experience for anyone; for the kite lover, it is a spiritual revelation, a profound look at the real message of kites and kiting—innocence, freedom, the fragile connection between heaven and earth. It is a moment in time to be remembered and treasured, an epiphany.

* * * * *

October 26, 2001

By a lucky stroke of fate, the authors, visiting Guatemala to view the annual *Dia de los Difuntos* fly, meet one of the leading authorities on the monster kites on their very first day in Guatemala. The chance event occurs in the San Marcos University Museum in Guatemala City when Fujino fortuitously spots a drawing of a kite on a bulletin board. As she reads the attached writing (she is fluent in Spanish after a stint with the Peace Corps in Honduras), a museum assistant approaches Ruhe and volunteers guide service. When the aide learns the two of us are in Guatemala for kites, she wordlessly leads us down the hall to a classroom where, amazingly, a workshop in the making of the traditional circular Indian kites, in miniature versions, is being held. The class is breaking up. The teacher is Cristobal Federico Carranza Sosa, director for 12 years of the kite fair at San Agustin Sumpango, one of the two villages where the giant kites are flown. The other village is quite near Sumpango and is euphoniously named Santiago Sacatepequez. Perfect!

Within minutes, Federico has agreed to serve as our guide and mentor for the whole cultural phenomenon we have come to view: the designing, making, and flying of giant kites. He agrees to brief us on history and ritual as well. A meeting with him in his hometown of Sumpango is scheduled some days off since the authors plan an obligatory quick trip to Guatemala's far north to explore the sprawling jungle Mayan ruins at Tikal, one of the great tourist sites in North America.

October 29-31

Rental car from the Guatemala City airport expertly and rapidly driven by Fujino, the two of us head to Sumpango, located beside the Pan American Highway. It being nighttime and the signage not all that clear, the jaunt fortuitously ends up elsewhere, in the ancient and strikingly picturesque town of Antigua—located in the immediate lee of a volcano that has periodically leveled it over the centuries. On the following day, we manage to find nearby Sumpango,



Giant kites on display on Sumpango flying field.

after a false start up a steep dirt road that lodges the car in a crossroads mud hole, with a dozen Indians gaping at the sight. We lodge in the only hotel in the immediate area, and seek out Federico. That night, he dutifully leads us on a tour of the Sumpango kitemaking scene, now with a few days to go before the *Dias de la Difuntos* reaching a quiet fever pitch. The highly industrious but very shy Mayan Indians have a deadline and they mean to meet it. Besides honoring the dead, they want to make something of a political statement with their handiwork. Just their ability to create these enormous masterpieces is a statement in itself. The declaration of self-worth in images and words on some of the kites is an underlying subtext.

Because the kites are so massive, the kitemakers require large spaces to make them in. Our first visit takes us to a truck garage, oil stains on the concrete covered by newspapers. There is almost complete silence as more than a dozen people toil, only a soft remark now and then. There is no music, no TV. Rudy Sula, 21, and his team are seriously at work. Sula, an architectural student, has three brothers and teenage sister on his team plus assorted friends, including a pair of 12-year-olds. All are busy cutting tissue paper to patterns and glueing the paper down on an elaborately worked out design by Sula. They are doing the kite in sections. These are then assembled and glued together. A perfectionist who has been making giant kites for 10 years, Sula has this year opted for a smallish six-meter (21 foot) kite. He explains he prefers to work smaller in order to obtain better quality. By Sumpango standards the kite may be small, but to Western visitors it is vast.

So just what is the process we are viewing? Guatemalan kites are manufactured from tissue paper glued together into elaborate geometric or other designs, sometimes in a half dozen or more layers. The circular kite sails are backed and then attached to bamboo poles to create a polygonal shape. Bridle and flying line are added, along with a tail made of cord and clothing remnants. The finished kite is raised to a vertical position out on the flying field and lashed to stakes set into the ground. It is then ready for viewing and eventual launching and flying.

Making the kite itself takes a boggling amount of work. Rudy Sula says his team has been working for six weeks——five hours a night Monday through Friday, 10 hours on Saturday; with Sunday as an off

Giant Kites



Frame is being fitted to the back of the kite sail.



Kite is raised to vertical position. It will be lashed to support poles.

day. The work goes on at night because the makers either have daytime jobs or are students.

Sula estimates his six-meter kite (remember, this is a relatively small kite) will consume two gallons of Resistol (white) glue, brushes, 3,500 sheets of 20by-30-inch tissue paper in 30 colors, a fair amount of bond paper for backing, 8 lengths of bamboo each six meters long for the polygonal framework, wire and cord to bind the frame together, and 30 meters of cord and clothing remnants for the tail. Dozens of pairs of scissors are needed. All of this costs \$350, which Sula pays out of his own pocket. The workers are volunteers. As the moneyman, Sula gets to keep the sail, which he lends free to expositions for team prestige and to promote Mayan culture. There is no commercialism involved at any level. Advertising messages on the kites are expressly forbidden by the community committee overseeing the festival. Really oversize kites, anything bigger than 40 feet or so, are now banned, as simply excessive.

Sula's design is brilliant and brilliantly realized by his team, called The Mayan Mentor. The center portion shows a Catholic church with women in the foreground selling yellow flowers—a symbol of purity—to be scattered on graves on the Day of the Dead. Below that is an image of a cemetery with pallbearers bringing a coffin to a gravesite, with human bodies, or souls, floating skyward, drawn by two kites. There are volcanoes in the background. In the foreground are harp, drum and xylophone—symbols of Mayan musical culture. Elaborate, multicolored geometric patterns fill the remainder of the kite surface.

Why does Sula keep making kites year after year? "It's simple," he says, in Spanish, with Fujino translating. "It's the only thing I can think of that permits me to revisit my Indian culture—combining my mind and my soul and my skills." Eloquently put!

Next stop is Association Ixchel, with 24 members led by Samuel Ixtin Cajbon, 29, a painter. Ixchel is a Mayan god. Cajbon says he earns his living by making landscapes and portraits, which he exhibits and sells all over Guatemala. He's been making kites for 18 years now, and likes the comradeship, democratic exchange of ideas, and equality of purpose entailed in their creation. Mainly, he says, he is proud that the kites express the art and culture of Indian Guatemala.

Predictably, the theme of the 12-meter (39 foot) kite Cajbon has designed is his country's history and art. There are vignettes on creation, dance, theater, sculpture, music, agriculture, games, architecture. Also, astronomy, spirituality, painting, and literature. A central panel shows women modeling some of the more than 24 traditional female costumes worn by the Maya.

Indefatigable, soft-spoken, intelligent, well-respected Federico, our guide, leads us to a third group, working in a warehouse. This team, Kukul-can, another Mayan god, is led by a woman, Velma Laticia Sol Cubor, 20, who works days as an illustrator. It is her fifth kite. She has 13 on her team and in this case everyone contributes to buy the necessary supplies. They are building an eight-meter model and on the night we visit, with time now short and much work to be done, they plan to work until 3 a.m., before snatching some sleep before heading off to regular jobs or school in the morning.

Unlike most Mayan women, who shyly turn their heads or wave a warning finger when they see a camera, Cubor is outspoken and happy to talk and be photographed. As with the other teams, the work here is done quietly, with great industry. If orders are given, they are rendered so softly and casually they escape notice. Everyone on the team is friendly and gracious to the visitors. There is a lot of gentle joking.

The three of us conclude the night's rounds with a visit to a small furniture factory where a team called The Happy Boys (this in English) is at work. Ali Fujino renews her acquaintance with Julio Asturios, 20, who was on the Mayan team invited to show its unique skills at a biennial kite extravagnza in Dieppe, France, in 2000. Fujino had met and liked him there. The Mayans were the big hit of that festival, amazing everyone not only with their intense labor but also the huge, showy kite that resulted. A graphic



The all-woman Orchids team cuts and pastes tissue paper to create an elaborate design.



A teenager hoists a kite fallen over the Sacatepequez cemetery wall for a new launch attempt.



Graves decorated with whitewash, flowers, and offerings in Sacatepequez cemetery.

arts student at San Carlos University in Guatemala City, Asturios explains that his team started out as a basketball squad and when it turned its hand to kitemaking and expanded to 17 members it simply kept its English name. He says three generations are represented on the team. Genial and all smiles, Asturios seems indeed to be a happy boy.

On the next night night, Federico leads us to kitemaking sessions by two all-women teams, the eight-member Orchids and the Hummingbirds. The latter group includes a mother and her comely 19-year-old twins, all very industrious and very, very shy.

November I, Day of the Dead

Just before midnight on Wednesday night, Oct. 31, Fujino and Ruhe head for the campo on a hilltop above the Sumpango pueblo, population 3,300. The dirt field serves for soccer games, kite flying, and community activities in general. Abutting the town cemetery, it is reached by steep, cobbled,

The giant kites are flown high, as this roll of line attests.

pitch black alleys, extra hard on the ankles.

This is the night for setting up, with the Day of the Dead impending. This being highlands, it is piercingly cold. There is no moon. Kite teams are assembling their frameworks. Some of the bamboo poles used in the polygonal frames measure a stupendous six inches in diameter. The resulting bones of the kite, in the case of a monster, may weigh upwards of 75 pounds.

The bamboo is first laid out in a symmetrical pattern, then wired and roped together. The whole is further joined by a rope circling the circumference of the poles, which are notched at their tips to receive the cord. Being larger than the frame, the sail overlaps it and thus can be doubled back and glued down for attachment.

Streamers are added for attractiveness and to add stability. Bridling is accomplished. As a final construction act, the tail of cord with remnants of clothing attached is fastened in place.

Meanwhile, squads of teenagers labor at one end of

the field erecting 30- and 40-foot poles to display the kites. First, holes are dug, then the poles raised via ropes handled by four teams, pulling from different directions, as needed. Powerful spotlights light the dramatic scene. As many as 50 boys and young men, all volunteers, do this work, which calls for skill, strength, agility, and sheer speed afoot. There is great excitement and wariness as the poles go up, one by one, since a mishandled pole could easily fall in an instant and strike one of the workers, causing a serious or fatal injury. This is the only time the soft spoken Mayans are heard to give loud orders and to shout warnings. Very understandable.

The setting up goes on through the

night, since there will be 10 twelve-meter or larger giant kites, 10 six-meter kites, and a swarm of smaller, student kites on display. If the winds are kind, the intention is to fly most or all of them. The really big kites get four poles to lean again, the smaller ones three poles. It's all an immense labor, enthusiastically and efficiently carried out.

Elsewhere through the night on the field and at its approaches locals erect small stands from which they will sell food, drink, and handicrafts. There are flower stands as well, so blossoms can be purchased to decorate graves in the adjacent cemetery.

Because this is a fair as well as a religious ceremony, there is a bumper car ride at one end of the field. Ali Fujino observes little boys sitting in the cars, decides



to join in, pays a small fee, gets the power turned on, and — finds herself circling the arena quite alone. The little kids are too poor to afford the ride. Fujino quickly stops, asks how much to hire all of the cars, and pays a total of 35 *quetzals*. Wild excitement grips the boys when they grasp what she is doing and soon all the cars are careening around, slamming into each other. Ali is paid a special tribute when ers. There is even a pizza stand. Beer stands are quite popular, but heavy drinking is not in evidence; it is not the Sumpango style. The beer has been donated by a brewer so the sponsoring kite association can pay for the powerful sound system, an indefatigable marimba band, groundskeepers, setup and cleanup crews, and myriad other expenses.

four cars driven by dervish boys attack her at one time. At the end of the ride, she walks down the field, now trailed by a pack of devoted admirers. "That was the best four dollars I ever spent," she says.

The morning sun ushers in the *Dia de los Difuntos*. A ceremony in the graveyard begins proceedings as the kite teams nearby finish rigging their kites and teams hoist them upright and lash them to the vertical logs. The scene gains drama from the four volcanos now revealed across the valley, including Acatenango and the active



Fuego, both about 3,800 meters (12,464 feet). It is a beautiful, dramatic scene.

Even though Sumpango is at a Denver altitude, by 10 a.m. the temperature reaches the mid-80s. Hour by hour the crowd streams in. Federico guesses about 95 percent of the population of Sumpango is attending, as well as Mayans and Ladinos (Spanish speakers) from all over the area, plus tourists galore. The crowd eventually fills not only the large field but also all of the adjacent overlooks, intently studying the kites, picnicking, meeting friends. Stands sell a wide variety of handicrafts, including kites at 60 cents on up, many being small masterpieces. Food stands peddle blue corn tortillas, orange halves dabbed with hot spices, and grilled ears of fresh corn—a favorite. A cotton candy maker works steadily for eight hours turning out pink froth, peddled by a swarm of helpAlthough the weather cools after the noon hour, the wind remains slight and at first only small kites are launched. Judging is going on, based on a variety of criteria, including ability to fly. By midafternoon, it is the turn of the six-meter kites and leading off is the all-girl Orchids team, beautifully dressed in indigo skirts and white blouses with elaborate, colorful embroidery. Although there are now some 20,000 people on hand in a relatively small space and crowd control is not great, to say the least, the team of seven gives it a game try, running swiftly as

they pull the kite line through a thin lane of parted spectators. The kite rises off the ground no more than 30 feet, then crashes. Not enough wind. The girls regroup and give it another try. Same result. There is a third try. Yet another crash.

The judges realize the situation is hopeless and suspend flying, awaiting a wind. By this time there is no thought of flying the monsters. One of them had been flown the day before, come smashing down, and killed a boy. With the immense throng on hand now, flying is clearly not in the cards for the day. Just too dangerous.

Anyway, everyone is having a good time. Besides the pleasure of examining the kites, quite various in their messages and every one interesting for its craftsmanship, people-watching in Guatemala is spectacular.

The stocky, brown Mayan women with their bright, clashing clothing put on an ever-changing iridescent fashion show. Many of the men dress colorfully too, some like cowboys with ten gallon hats and tooled boots. Mongolian looking faces and long black hair clearly show Mayan blood originally comes from Asia. It's the most photographic scene imaginable.

It is announced that the Rudy Sula kite has won the six-meter award. The title for the 12-meter kites remains unresolved, however, over unknown issues.

By 5 p.m., with the sun waning and no wind in the offing, the crowd starts thinning. It has been a wonderful, long day. Except for lack of wind, this 23rd annual Sumpango celebration has ranked as successful, says Federico.

November 2, All Souls' Day

Because it was impossible to view both the Sumpango and Sacatepequez flying on the same day, because of wild overcrowding in two basically tiny villages, Fujino and Ruhe take advantage of the fact that Sacatepequez stretches out its religious celebration over two days to go there on the second day, All Souls' Day. On this day, souls of the dead are commemorated in the belief that those not yet sufficiently purified will be aided by the prayers of the living.

With less space than Sumpango, Sacatepequez, population 2,700, does its kite flying right inside its steep, hilltop cemetery with a great view out over the surrounding countryside. The religious tone here is stronger because of the site, but the flying much trickier, as boys pulling launch lines thread their way at speed between tombstones. We see several youths take headers.

With 12 giants, Sacatepequez on the day before has more than matched Sumpango's 10 12-meter kites. But on this second day, the crowd is thin and the number of kites on hand substantially fewer. Still it is another exhilarating sight. The weather is sunny and, for a change, the wind blows briskly every now and then. This is the signal for intense launch action. Many kites are flying high in the sky.

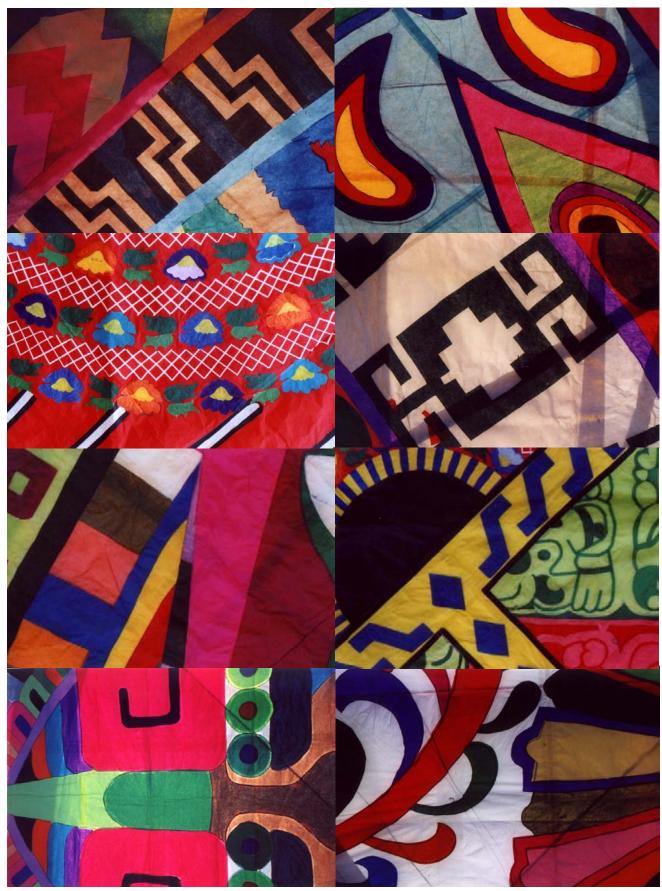
For political reasons not clear to casual visitors, Sacatepequez receives substantial government support for its festival and even has a small kite museum, mostly a display of photographs. Sacatepequez is the town written up in guidebooks and its flying probably draws many more tourists—both Guatemalan and foreign—than does Sumpango. Sumpango now seeks equal support and our knowledgeable guide Federico thinks his home village will receive it in future years. Tourism is the thing these days.

One noticeable difference: Sacatepequez kites seem to focus on geometric designs; messages and recognizable images on kites are few and far between. Another local style is to festoon the kites with flags.

As a way to bond local communities through group participation, Sumpango and Sacatepequez prove that harmony and solidarity are necessary for flying success. In this they resemble the flying of giant *o-dako* kites in a dozen towns in Japan such as Hamamatsu, Sanjou, and Hojubana, where, while the emphasis is more on competition between villages and other teams than in honoring the spirits, the consequences are similar—the individual submerged into a larger communal whole.

Fujino sums up: "Sumpango and Sacatepequez are all about community spirit---a statement by the Indians that they don't see themselves as individuals but work as a group. There's a lot of emotion at the festivals, they are bigger than life. There is no commercialism, and that makes a difference. They are pure, unique, enduring, uplifting."

With Guatemala colorful in the extreme, welcoming to visitors, and easy to get to from the U.S., anyone with more than a passing interest in kites should plan on making a pilgrimage there. It's a trip never to be forgotten.



Geometric patterns on the giant tissue paper kites create a patchwork assemblage of originality, vitality, and unusual beauty.

Documenting the Giant Kites

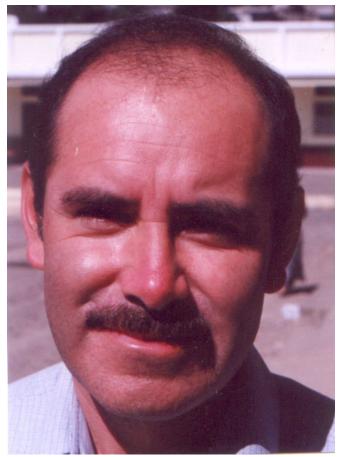
Because of the cultural importance, and sheer drama, of the giant kites of Guatemala, the Drachen Foundation has arranged for a documentation project at the key village of Sumpango, near Guatemala City. The resulting archival material will be made freely available via the Internet by Drachen, a nonprofit corporation.

Drachen is working through the *Comite Permanente de Barriletes Internacionales Sumpango, Sacatepequez, Guatemala*, a nonprofit organization headed by Cristobal Federico Carranza Sosa, an electrician by trade and for 12 years head of the town's Day of the Dead observance, when the *barriletes gigantes* are flown.

It is projected that photographs he and others take will document the whole elaborate process of kite design, construction, and flying; the participating volunteer groups; and the big kite fair at Sumpango on Nov. 1, which last year drew 20,000 spectators. In addition to these contemporary images, historic photographs from Guatemalan and other archives will be collected. An extensive trove of magazine and newspaper articles on the giant kites, in a variety of languages, is to be assembled. Film and television footage, as available, will be gathered. Finally, selected kites and kite-related artifacts, such as the materials and tools, if unusual, used in the making of the kites, will be gathered.

The Drachen grant to the Guatemalan committee was conceived and is being administered by Ali Fujino, administrator of the Drachen Foundation. A former Peace Corps volunteer in Honduras and later a Unesco consultant, Fujino is fluent in Spanish and knowledgeable about Central American peoples and cultures.

The new project parallels documentation work currently being done by Drachen in Cambodia, the Philippines, Thailand, India, Malaysia, Russia, and



Cristobal Federico Carranza Sosarespected, fair, knows everyone, unflappable, a kind of unofficial mayor

several European countries.

It is hoped that documentation of Day of the Dead kite flying in the cemetery at Santiago Sacatepequez on the same day as the annual Sumpango celebration will be undertaken in the future, when a suitable researcher can be engaged. Sacatepequez is 10 miles from Sumpango. These are the only two villages in Guatemala that observe the important lst of November religious holiday by flying large kites.

Kiteflying as a passport for travel: "In traveling, you make really nice friends around the world; it makes you feel you're an inhabitant of the whole earth, and not just a city."

Pierre Fabre, Paris,

A Kite Lexicon

Sumpango—Mayan village 18 miles from Guatemala City where giant kites are flown on the 1st day of November.

Santiago Sacatepequez—Another village, 10 miles from Sumpango, where large kites are also flown that day.

Indigenes—Mayan Indians.

Kachiquels—*Mayans living in the Sacatepequez region.*

Popul Vuh—The Book of the Maya, a narrative of pre-Christian Indian festivals and practices, including kiteflying.

Orden Franciscan—The Franciscan Order, which incorporated traditional Mayan kiteflying into Catholic religious observances.

Dia de los Difuntos (or **Muertes)**—Day of the Dead on Nov. l. Kites are flown to convey messages of comfort, affection, and devotion to the deceased.

Barrilete—Kite.

Papel de Chine—Colored tissue paper, used in making kites.

Armazon—Polygonal bamboo or cane framework of kite.

La cola—*Kite tail made from cord and remnants of clothing.*

Los flecos—Tissue paper streamers added to edge of kite for beauty and for flight stability. Zumbadora—Hummer, made from cord coated with tissue paper and stretched between two protruding reeds atop kite.

Linea or ropa—*Line or rope, for tying framework and for flying kite.*

Vestilla or cana brava—*A* sturdy wild reed used, instead of bamboo, to frame smaller kites.

Camposanto (literally "holy field)—Cemetery. *Campo*—Spacious dirt field, used for soccer, kite-flying, general community activities.

Lunada del barrilete—Constructing framework, attaching paper skin to frame, and rigging kite for flying; this is done by the light of the moon (luna) on the eve of the Day of the Dead.

Estructura por barriletes—*Tall posts imbedded upright in the ground to support the giant kites in a vertical position for best viewing.*

Fiambre—*Traditional cold meal of fish, meats, vegetables, salads, and spices, mixed together and served to family and guests on the Day of the Dead.*

Colotenango—Wooden xylophone, or marimba, played during Dia de los Muertes observance. **Un arco iris**—The rainbow look as sun shines

If You Want to Go

Airfare. Seattle to Guatemala City return, via Houston, is in the \$525 range.

Health. See your physician or go online.

Hotel. There are very few accommodations in the Sumpango area, none in the village itself. A clean, adequate hotel along the adjacent Interamerican Highway is \$30 a night.

Transportation. Rent a car at the airport. Not expensive. Credit card required, as is an international driver's license, costing \$15 in U.S. Two ID pho-

tographs needed. Auto insurance is mandatory. Be warned: driving in Guatemala is not for the fainthearted. Bus service is cheap, but some Spanish is necessary.

Food. Budget \$12 a day. Tasty international and Guatemalan-style food is readily available. Expect tortillas instead of bread. Black beans and rice and fried plantains are the local staple. Ears of corn roasted on a grill are a treat. Fruit is superb, particularly the pineapple and watermelon.

Water. Drink only bottled water and use it to brush your teeth. Refuse ice served in drinks.

Guidebooks. A wide range is available. Ulysses is a good bet. Excellent, up to date travel information is available online.

Time needed. To see the giant kites, figure on one day of travel from the U.S. to Guatemala, one day in Guatemala City to regroup and see the museums, one day (Nov. 1) in Sumpango, one day (Nov. 2) in Sacatepequez, one or two days for side trips to old, beautiful Antigua or the Indian market (Thursdays and Sundays) at Chichicastenango, or to Lake Atilan, and one day to return home. If you want to go to far away Tikal, the great Mayan temple complex in the jungle up north, add two days. Airfare from Guatemala City to Flores return is in the \$225 range.

Shopping. Beautifully made small kites are readily available in the kite villages for 60 cents upward. Bring your own line to fly them! (It is inappropriate to the festival spirit to fly Western kites. This is a chance

to leave your kites at home.) Shopping everywhere is wonderful. There is an enormous range of folk crafts available at inexpensive prices. Bargaining is customary.

Weather: Kite flying takes place at the end of the rainy season so be prepared. It can be quite hot during the day, but cool and even cold at night. Bring a sweater and jacket. Sturdy walking shoes are a must.

Photography. Exceptional opportunities. The Indian women dress like peacocks. Bring lots of film.

Language. Little English is spoken. Consider joining a tour or hiring your own guide in Guatemala City.

Further information. Contact the Drachen Foundation.



Detail from a barrilete gigante: Kites draw the souls of the dead into the sky, as pallbearers bring a mortuary casket to the cemetery. A volcano looms.



The Orchid team attempts a launch but is defeated by lack of wind.

Teaching Kiting in a Dangerous War Zone

When Christophe Cheret and associate Richard Poisson, both Burgundians from France, went to Hebron in Palestine last summer to teach kitemaking and flying to Arab children, they found that kiting was one of the few play activities there. The reasons have to do with the special circumstances of life in one of the most highly disputed cities in the world. Hebron has 500 Jewish settlers living, for religious reasons, in the midst of 120,000 Moslem Palestinians. Only Israeli army protection permits this to continue. For years now there have been daily tensions that have often erupted into violence.

Kites are popular partly because they are cheap, or even costless. As Cheret comments, "Buying some line only costs 40 cents for half a mile. The rest of the material can be gotten free. Materials such as sticks, paper, plastic bags, tissue paper, and rags for tails are readily available. Or broken kites can be recycled. There is a very important problem of poverty in Palestine. Money is used for living and studying—for school books in particular. There is none for toys."

Another important factor for the children is security. "Kites can be made at home, a secure place. They can be flown alone, from the child's own roof; there is no need to roam the city to find friends for a soccer game. Walking in the city can be dangerous and difficult. Not a lot of space is needed for kites. In case of a clash and the immediate imposition of a curfew, a boy can quickly duck back into his house, if necessary leaving the kite flying and line dragging. Parents favor kites. They can always keep an eye on their child when he flies."

The attitude of the authorities is a critical aspect. "Because most of the children from Hebron work in the streets selling fruit juice, children's books, and comics," says Cheret, "it is difficult for them to find friends to play with, and beyond that, groups are not popular with the authorities, either Palestinian or



Making a Sled in a workshop.

Israeli. Authorities fear a casual sports meeting will abruptly turn into a political event. In fact, before the Oslo accords of 1993, gatherings were banned."

Cheret continues, "My last idea is pertinent too. The kite is an excellent way for the child to fly away from the scary daily problems of the city. I saw the faces of the children as they flew. They were for the moment carefree. Children as young as 7 and 8 years of age are very politically conscious, understand the stakes of the conflict between Israel and Palestine. The children are very clear-headed. They watch TV—there are five Arabic channels in Hebron, as well as American and Israeli networks."

Children being children, Arab boys and Jewish settler boys have more than once flown kites close to each other at Hebron boundaries. Since cutting line is unknown in this kite culture, the flying was competitive but combined with much showing off. Cheret understands this to be more fun and games than battling. Kites promote peace, Cheret feels. "After all,

Hebron

the sky belongs to everyone," he says. "Kiteflying," he feels, "should be an experiment in living together. Maybe that's a utopian vision."

What exactly were Cheret and his colleague Poisson doing in Hebron? As members of the nonpolitical association called *Droit de Vent* (Straight Ahead, roughly), which specializes in doing cooperative creative kite projects of all sorts, they were part of a French group of 40 teaching sports and the arts as a way to promote peace. The project was called Hebron 2001. The sponsoring agency was a French organization named the Business World Sport and Gymnastics Federation, which promotes popular education globally.

An ex-banker turned social worker, Cheret is married and has four children. Poisson, another social worker, is a bachelor. Both are in their 30s. For Hebron 2001, they were considered artists and were joined on the arts team by a dancer, martial arts instructor, and two painters specializing in graffiti. The other instructors taught soccer, volleyball, ping pong and so on.

The Droit de Vent project in Hebron was supported by a small grant from the Drachen Foundation. Funds given were used to purchase materials for making kites. Christophe Cheret can be contacted at droitdevent@free.fr.

Cheret says he and friend were so busy teaching kitemaking and kiteflying to 500 children in large workshops averaging 45 youngsters that they barely had time to make photographs. Kiteflying, they quickly learned, is done mainly by boys, because little girls are put to work caring for younger siblings. As a matter of principle, however, the Frenchmen made sure their workshops had an even mix of the sexes. They gave workshops too for selected adults, who could then give classes on their own.

Although the typical kite of the area is a three-sticker with six-sides, they taught their students how to make previously unknown Sled kites. This gave the



Richard Poisson talks kiting with Arab boys.



A boy flies a kite from the safety of a rooftop in Hebron, Palestine.

children a new shape to learn. In any event, as Cheret points out, to have taught the Hebron kids to make a kite they already knew how to construct would be as crazy as teaching the Edo in Tokyo.

Wood was used for spars, paper or plastic for the skins. Tails were made from cord with tissue paper or rags attached for drag. Plastic flying line was wrapped around a stick reel.

Hebron

Flying typically was done after school, in moderate but swirling winds because of the hilly terrain. Cheret saw some of this flying. "When a child makes a kite, for him it's a living thing—a bird, a butterfly. I did see children smiling for a while. That's a little and a lot."

"We were sad in Hebron, though," says Cheret. "There were many workshops but really not much flying. It was just too dangerous to get our groups to a field." He also regretted that politics forbade he and partner from teaching Israeli boys and girls what they were teaching Arab children.

Cheret's most interesting experience? He and Poisson worked extensively with a Palestinian organization called Defense of Children International, which has under its care psychologically wounded children. Traumas occur because of bombardments, jailings, deaths of parents. Kitemaking and flying is seen as useful therapy for these children. One benefit for them is the restoration of a small measure of trust between children and adults. Hebron boys, Cheret feels, often lack faith in their elders, feeling they are not heroic enough. The boys, he says, are not shy about expressing this.

Hebron children are very active in making drawings of their daily life. These drawings clearly show their anxieties, Cheret says. The two Frenchmen accordingly left behind at the Defense of Children headquarters four big kites with blank white sails. When they return to Palestine next summer, as they plan to do, maybe to the Gaza Strip where there are beaches and less danger, they hope those four white kites will be completely decorated. If so, they feel a page will have been turned.

They also left behind their sewing machine, complete instructions for making and flying Sleds with emphasis on methods and tools, and information on how to use the Internet to bring up further information on kites.

"The result of the workshops now belongs with the children," Cheret says.

Heritage Project At Farnborough

Samuel F. Cody's kites and other artifacts of Farnborough England's 100-year-history as the birthplace of British aviation are expected to find an exhibition home when a huge airship hangar is rebuilt at Farnborough, west of London. Farnborough was the home of the famous old balloon factory of 1905 where the British developed their wide-ranging aviation establishment prior to World War 1.

The canvas clad hangar measuring 70 feet high by 200 feet long was dismantled in 1914 and its framework used to construct other buildings. This framework will now be used to replicate the hangar as a Farnborough heritage center. Countless aviation treasures are held in storage at Farnborough, including the famous Cody man-lifting war kites that led directly to his invention of the first manned airplane in Britain. The Farnborough Air Sciences Trust is serving as architect for the project.

As is widely known, the Drachen Foundation is currently the owner of the most extensive collection of Cody kite material extant, purchased from his family at auction at Sotheby's in London several years ago. The holding includes Cody's journals, glass plate negatives, records, and a number of original kites.

The Joy of Kiteflying

Thus soaring, this flying along, Ethereal pleasures we find, May Heaven accept our song Who lends us the wings of the wind.

The pious lark sings as it flies And we who thus follow its flight May hope, when our string breaks, to rise And soar midst the seraphs of light.

George Pocock (d. 1843)

World Kite Museum Seeks to Expand

By Ben Ruhe

Eleven years after opening its doors to the public, the World Kite Museum in Long Beach, Washington, is alive and flourishing. It's also ambitious. With more than 90 percent of its collection of 1,400 kites in storage because of severely limited exhibition space, the institution is seeking to expand in a major way.

Proposed is a new building on a nearby choice piece

of state parks real estate between the town and the famous beach with its northwest wind that never quits and never an evil-looking tree in sight. The 27mile beach, as wide as a football field, is considered one of the best places to fly kites on the North American continent.

Having signed an agreement last year with the state to build on a six-acre park site, the museum is now raising funds for a projected structure that will increase its space tenfold. The site is rolling sand dunes linking town directly to



Kay Buesing, director of World Kite Museum.

beach along Bolstad Road, perhaps the most used access road to a beach in the state. This is the road used for the annual Long Beach kite fly which draws up to 100,000 people for a week during August. Motel reservations typically have to be made a year in advance.

The building plan calls for a long, slender structure with curved roof. The museum will be two stories at

to the full height of two, at the exhibit side. It is to be built of concrete with a steel skin, possibly CorTen, to resist scouring by sand and seawater. With this construction, the skin rusts, and forms a protective surface. To prevent bleaching of kites on exhibition, there will be limited natural lighting. The two-story height of the avhibit hell will permit display of some

its administrative and storage side, a single story, but

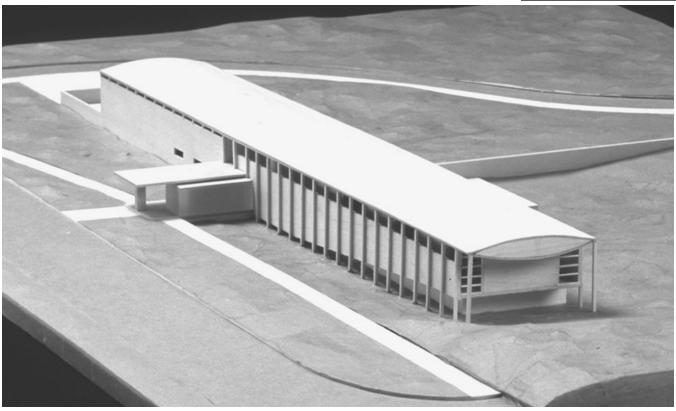
height of the exhibit hall will permit display of some

of the giant kites in the museum's collection, including a 30foot Japanese Shirone and some 25-footers from Bali. This is not to mention a dragon kite from China measuring 100 yards long, if one counts the tail.

"Perfect," declares Kay Buesing, director of the museum. She, along with husband Jim, co-founded the museum. Kay is a retired teacher, Jim, now ailing and serving as a museum advisor, is a retired social services administrator. "The new museum will be a major contribution to the community," says

Kay Buesing. "It will be wonderful for the Pacific Northwest and for the world kite community as well."

Soliciting gifts from public and private sources, the museum has set a fund-raising goal of \$3.5 million, \$2.5 million for construction and \$1 million for an endowment. It will be a hard slog, Kay Buesing concedes, particularly during a period of economic



A model of the proposed World Kite Museum at Long Beach, Washington. A concrete shell will be enclosed by a steel exterior to protect the structure from the scouring winds of the Pacific Ocean. The projected building nicely links the town with the beach, scene of a famous annual international kite fly.

downtown. But Buesing remains optimistic, as is her nature. "Who would ever have thought we'd have come this far?" she asks. A professional fundraiser has been engaged and some money brought in already. Donations go into an escrow fund, Buesing says.

Contributing to her upbeat view is a recent development. The city decided to save a threatened railway depot located along the former rail line that ran the length of the 27-mile peninsula, used to convey tourists in the summer and oysters year round, and relocated the building for community use on an empty lot next to the museum. Now nicely refurbished, the structure is perfect for meetings, lectures, and workshops. Its principal user so far has predictably been the Kite Museum, only several feet away from it. "Some people in town call it 'the museum annex,' " says Buesing, with a smile.

But this short term help does not solve the museum's basic problem. For the long haul, it needs much,

much more space for its expansive collection, much of it superb Japanese, Chinese and Malaysian kites collected by the late Seattle architect Dave Checkley and donated by his family. It needs room for larger exhibitions, for its expanding library and archives, for a really good gift shop, for larger-scale lectures and workshops, for ample administrative quarters. It needs lots of parking space. The planned building and grounds would provide these.

Tim Rohleder and fellow members of the Seattle architectural firm Rohleder, Borges & Fleming designed the new museum. Rohleder specializes in cultural centers and has served as assistant or principal architect for museums and cultural centers in various Western states, notably the Arizona State University Fine Arts Center, in Tempe, and seven museums and galleries in the State of Washington, as well as a cultural facility for the Umatilla Indian Confederation in Pendleton, Oregon.

New Kite Museum

Rohleder points out that the structure as designed will not only reinforce the town-to-beach connection but will be an integral part of a pedestrian loop now formed by park trails and a boardwalk facing the Pacific Ocean. "The museum itself," he adds, "will tell a terrific story of kites as science, art, religion, and sport. I'm excited about it."

Although some think its title of a "world" museum rather grandiose, considering its present small building, a former motel complex, and the fact it is located in a quite isolated part of the country——Portland is a 2 1/2 hour drive away, Seattle 3 1/2 hours—the World Kite Museum has thought big from the start. It also has a Kite Hall of Fame, which over the years has honored such as Hargrave, Jalbert, Rogallo, Cody, Bell, Pocock, Eddy, Ben Franklin, Lamson, Modegi, Lynn, Hashimoto, Skinner, and of course the Wright brothers. All are renowned names in the kite world.

But at the highly successful annual kite festival last summer, the Hall of Fame added a new dimension to its choices. It chose a comic strip figure as one of its stars. The choice? Well, obviously, Charlie Brown of Peanuts fame, the boy who never got it right with kites but amused millions in the process. The group assembled at the ceremony where the announcement was made applauded a charming, apt selection. Champagne was drunk amid cheers.

Kay Buesing has the last word. "All these years we have emphasized education with large and small exhibitions, publications, traveling shows, workshops, lectures, now a website—what else but www. worldkitemuseum.com? We have soldiered on with a devoted, mostly volunteer, unpaid staff. I myself am a volunteer. And we have added a lot to the life of Long Beach and the whole Pacific Northwest, as well as international visitors. The museum has given a lot of pleasure to a lot of people."

"And we're really just getting started," she adds. "And, yes, I'd do it all over again."



Charlie Brown never got it right, snagging his kites in countless trees and in general failing in uncounted ways. But millions smiled over the years at his hopeless attempts. Keeping the memory of the late Peanuts cartoonist Charles Schulz alive, the World Kite Museum in 2001 made Charlie Brown the newest member of its Kite Hall of Fame.

Flying a Kite in the Great White North

Dr. Mike Jensen demonstrated the continuing utility of the kite for scientific studies on a two-month trip to the North Pole last summer. Traveling with a group of scientists aboard the Swedish icebreaker Oden, Jensen, 32, a research associate with the Cooperative Institute for Research in Environmental Sciences in Boulder, Colorado, put up a Stan Swanson Parafoil preparatory to attaching a package of instruments to the line. The instruments measured temperature, air pressure, humidity, and wind direction and velocity as the kite rose some two kilometers into the atmosphere. Another instrument aboard measured particles in the air-how many and their size, from 20 nanometers up to 1 micrometer. The vertical profile Jensen obtained was distributed to other scientists aboard measuring specific chemicals in the air so they could try to understand where the chemicals came from, how they moved through the atmosphere, where they would end up. The data was

used in studies to preserve and if possible improve the global environment. With guards posted to warn off roving polar bears, Jensen did his kite, and sometimes balloon, studies on a number of days during the voyage, which climaxed with arrival at the North Pole at 7:02 a.m. on July 31. The scientists knew they had arrived at the top of the world when their global posititioning instruments registered 90000.00! After a breakfast that included pickled herring, smoked salmon, caviar, and champagne, the scientists and crew celebrated on the ice sheet with snowball fights, dancing, golfing, and the building of snow angels. Some skied around the world. Others took a dip in the water, guarded by scuba divers. Although it was snowing hard, Jensen flew a kite. Flags and messages in bottles were placed. Photographs were made. "Altogether, an awesome, scientifically useful trip," sums up Jensen.



Bear observes.....



Mike Jensen flying kite.

Benjamin Franklin, We Salute You

By Nelson Handel Los Angeles Times

Actress Lauren Bacall once said, "Imagination is the highest kite that one can fly," and nothing prompts flights of fancy like the sight of a soaring kite. To fly a kite is to shake hands with the wind. Kites are great unifiers, cutting across specious social boundaries with a flick of their whimsical tails. From the kite's point of view, all God's children have strings. We got philosophical with some ground crew members at Redondo Beach at a July 2001 gathering by the Sunshine Kite Co.

Slavka and Jan Rehacek, Buena Park (biplane kite, \$20): How do you resemble your kite? Jan: I'm a pilot. It goes with the territory. How high is high? Slavka: Everything above my head. Jan: I don't have a limit. Kite-flying: an art or a science, and why? Slavka: Both. It has beautiful aerodymanics, and it's a free spirit in the sky. How high can you fly in your mind? Jan: Depends on if you're drunk, sober, or stoned. Where do kites go when they die? Slavka: They stay in my mind like old pets. Tommy and Christina Cardenas, daughters Belinda and Sarah, San Bernadino (Winnie the Pooh kite, \$15): How do you resemble your kite? Christina: I don't want to state the obvious, but we're chubby like Pooh. How high is high? Tommy: 150 feet.

Christina: When the string runs out. Kite-flying: an art or a science, and why? Christina: An art, because it's just fun.

Tommy: A science, because you need the right weather.

How high can you fly in your mind? Tommy: Depends on your goal. We all want to get high up but it's a struggle. Where do kites go when they die?

Christina: To kite heaven, which is full of trees so you can point and say, "That's my kite."

Dis Prioleau, Los Angeles (bug kite, \$4): How do you resemble your kite? Happy and playful. How high is high? Very, very, very high. Kite-flying: an art or a science, and why? An art, because my kite has art on it. How high can you fly in your mind? All the way to the clouds. Where do kites go when they die? To kite heaven, where it's very colorful and people are friendly.

Len Zak, with granddaughter Hannah Perry, Torrance and Escondido (Delta kite, \$23, F-111 kite, \$30): How do you resemble your kite? Hannah: The pilot in the windsock has braces, too. Len: It has long trailers, like my beard. How high is high? Hannah: Over my head. Len: as high as I can jump. Kite-flying: an art or a science, and why? Hannah: A science, because it takes science to get it into the air. Len: an art. I work with string and color and wind in the sky. How high can you fly in your mind? Hannah: To space. Len: Throughout the universe. I also jump out of airplanes.

Evolution of a Kite That Will Lift a Man

Editor's note: For balance in its historical and contemporary coverage, this publication runs occasional first person accounts of old, important experiments with kites. Herewith is an elegantly written article from the April 1899 issue of McClure's magazine by a 39-year-old serving Scots Guards officer in England, brother of the founder of the Boy Scout movement.

By Captain B.F.S. Baden-Powell

It is very remarkable how people pass by good inventions and good ideas and won't take to them. Kites, for instance, have been known for hundreds of years. Everyone knows of them the world over, yet till a few years ago no one thought of putting them to any use. When I say no one, I do not mean that exactly, for Franklin and others, of course, used kites for meteorological experiments; Pocock drew a little carriage along with them, and several others suggested their use for life-saving at sea. But it has been only during the last three or four years that inventors have taken up this long neglected contrivance, and now we hear of remarkable kite experiments in many different countries. It is, however, of my own particular improvements that I write.

My first object was to get an idea of the capabilities of a kite for lifting weights. Naturally the lift depends on the strength of the wind; and I soon found that the wind varies so greatly in strength, that it is very difficult to get accurate working figures. One day I had a kite of some 20 feet up, and found that I could put stone after stone into the little bag hanging beneath, up to a total weight of six pounds, and not overweight the kite. I felt quite triumphant. On this basis, three-tenths pound per square foot, a kite of 500 square feet should lift a man. Thus encouraged, I worked all the harder. But I soon found that the kite is an awkward customer to deal with when you get on the wrong side of him. He can be very bad tempered, and often refuses to do what he is told. I had to devise new methods of construction in order to keep portable so huge an apparatus as I required. First, the tail required consideration (for I had been

First, the tail required consideration (for I had been brought up to believe that a kite must have a long

appendage of string with bits of paper tied along it at intervals). This tail was the bother of my life. The papers got wet and tore off. I substituted bits of stick. Then I thought it was not heavy enough, and added weights. Next, I imagined it did not have enough resistance to the wind, and I put on canvas cones. And, then, oh dear! The bother when that tail became entangled. Well, one day it was blowing very hard, and the kite would not fly steadily. I added more and more to the tail, till finally I put a great bush on the end of it. The kite went up, then dived over, and then circled round and round, the bush alternately sweeping the ground and the sky, until it nearly swept me off the face of the earth. At last I got the kite down, and sorrowfully took the whole tail off, determined to add still more length and weight. But a sudden gust came, and took the kite right out of my hands. Up it went, indecently tailless, and flitted about like a bat, though on the whole much steadier than it had been with the ponderous string of brushwood hanging from it. From that day I have rarely put a tail on a kite.

That was one great result. I went on improving details, but made no important step until March 1893, when, after trying a great many unsatisfactory arrangements for steering the kite out of the wind course, I hit upon the plan of having two flying lines, one on each side of the center. In this way, I found, I could not only steer my kite to a remarkable extent on either side of the wind course; but in a gusty, variable wind, I could, by fastening the two lines at a distance apart, keep the kite floating perfectly steady. I then returned to weight-lifting. After many trials, I was one day delighted to get a kite of about 100 square feet to lift a weight of 56 pounds clear of the ground. I now made the kites bigger and bigger until, in May 1894, I had

Baden-Powell

a huge contrivance of bamboo and canvas, 36 feet high, with an area of about 500 square feet. To get a sailmaker to piece together the lightest canvas for the cover was easy enough, but how to make the frame was the difficulty. To calculate the strain would be the way to begin, but what wind was I to allow for? If I made provision for a gale, my apparatus would weigh so much that no light breeze could lift it. So I began the other way. I got some light bamboos, lashed them together, and stretched the canvas on the framework. It rose majestically, quietly doubled up and collapsed, and sank to the ground a wreck. So I made a stronger framework, and sent the kite up by two cords, with a basket suspended between them.

The result was satisfactory as far as it went, but that wasn't far. I smashed dollars and dollars worth of bamboo. Again and again, when I thought I had made a really good piece of apparatus, some little detail would go wrong; the kite would rise up in the wind, turn sideways, and come plump down against the ground, smashing every bone in its body. To me it was heart-rending to see, but to mere spectators it proved most entertaining. They roared with laughter.

However we progressed; and so satisfactory did our work at last become that one day—it was June 27, 1894—we decided on putting it to the crucial test. The question, not so much with me, for I was very confident, but with assistants and lookers, was, "Will it lift a man?" The weather was not favorable. The wind came and went: a strong puff, and then a lull. As he seemed so light, I was kind enough to allow my youngest and lightest brother officer to take the seat of honor in the basket, and see if he could be lifted. The kite was meanwhile flying perhaps 50 feet overhead.

Suddenly the wind freshened. There was a creak of the basket, and up it went, man and all, while we retained hold of the cords to prevent his being carried too high. My machine had really lifted a man. I then got into the basket. It lifted me, too!

Again we persevered, and gradually the kite improved and grew more tractable. I now found that numerous difficulties arose from having so big an apparatus, not the least being that it proved much too powerful in a strong wind. So I returned to smaller kites, and fixed several together, their number depending on the wind force.

I had come to the conclusion that the best shape, considering lightness, convenience of folding up, power to lift, and ease of making was one in which the frame consisted of three poles of equal length, one placed upright and called the "backbone," the other two put across the "backbone' at right angles, at a distance from either end of it equal to about one-sixth of its length. The shape was thus nearly hexagonal. This form, for want of a better name, I christened "Levitor." The most convenient size was that in which poles not more than 12 feet long were used. This made the area of the kite about 120 square feet.

From just lifting a man, I got to lifting him easily. Once a kite takes hold a man, it may lift him to any height. If it was capable of lifting a man during the puffs 10 or 12 feet (in the intervals letting him down with a bump), why not 300 or 400 feet? But what about that bump? At first I took care that no one should ascend to a greater height than he could safely fall, however much the kite might want to take him higher. I tried to arrange that the lowest kite should act as a parachute in the event of the wind dropping or the rope breaking. This I tested while a good fat sandbag was the occupant of the car. All I can say is that I am glad it was a sandbag and not a man. I thenceforward adopted a regular parachute, but the objection to this was that it wouldn't open until it had fallen about 50 feet; so if my man chanced to be up no more than that height, an an accident occurred, the parachute was not of much use, and even such a detail as a drop of 50 feet I didn't care to leave unprovided for. I next arranged a framework to the parachute to keep it permanently distended.

Things were now going so well I decided on a public exhibition, and I took the apparatus down to Ipswich to show to the savants of the British Association. There were many delays at starting. I had no experienced assistants. But when we got to the business, the five kites did their work well. With the parachute spread above my head and balloon-like car to stand

Baden-Powell

in, I went up to the end of the tether, 100 feet. Numerous trips to this height were also made by others.

Anybody can understand a kite's lifting in a strong wind, but to be really useful it ought to lift also in a calm. You may say that the whole principle of a kite depends upon wind; but does not the smallest

schoolboy know otherwise? If he wants his kite to go up, what does he do? Why, he runs with it. So I got about 20 men, one very calm day, and set them to run, but the difficulty was that the men got out of breath and couldn't go for more than a few seconds-though in this time a man was actually lifted off the ground. Then I tied the rope to the back of a cab, and set that going, but the old horse was too lazy to get up speed. Next I fixed a kite directly to a horse. This did very well for one kite, but one was not enough to lift a man; so one day we arranged a number of kites in tandem, laid them on the ground, fixed

the car in place, and laid out a *A Baden-Powell man-lifting system*. rope about 1,000 feet long, and

attached it to the horse. In order to get the desired space, this rope was carried over an oak fence.

When all was ready, the signal was given, and off went the horse. Just as the kites were going to lift, I noticed something wrong with them. I shouted to stop the horse, but the groom did not hear. I ran forward to set the kite right if possible, but I only pulled it over so it turned turtle and scraped along the ground. The other kites followed. I yelled out to stop the horse, but he became frightened and went tearing across the field, the car dragging and bumping along, and the kites continually catching in the ground and breaking. Soon the car came to the fence. There was a crash and a bang, some yards of fencing were hurled to the ground, and the horse, thus suddenly checked, turned a somersault and threw his rider like an arrow from a bow. Another day I very nearly experienced a new sensation. There was a set of kites flying low. A long light line was suspended from the cable, and the greater part of this lay entangled on the ground. I was busy trying to get it disentangled when, for some reason, up went the kites, and down I fell on my back. I had

> been dragged along thus for some yards, and was just about to be lifted a few hundred feet by my ankle, when a bystander rushed out and cut the cord.

> To sum up, we have, as a result of our experiments thus far, an apparatus that can lift a man several hundred feet. This can be safely and surely, so as not to risk life or limb, and even without wind. As compared with a balloon equipment, this apparatus presents important advantages. My entire "kiteage," with ropes and all, weighs only a little over 100 pounds, and can be carried by two men. When the order is given to ascend, I can unpack, set up, and send up the kites in about

five minutes. I now require no manual labor to haul down, as the kites can be lowered by a gentle pull on the "regulating line," which determines the angle they present to the wind. If the apparatus catches in a tree and gets torn, it makes but little difference, and the injury is easily remedied. If it were a balloon to which the mishap befell, the gas would be lost, three wagon loads more would be required to refill it, and it would need very careful patching before it could be used again. The same advantage would be held by the kite if a hostile bullet had penetrated either apparatus. And then, finally, the kite would involve, originally, probably not the 20th part of the cost of the balloon; perhaps not a 100th part.

Memories of Kiteflying In Port au Prince

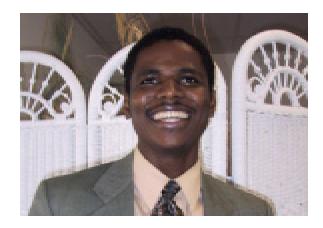
By Martin Fils Barthold

We flew kites in the Easter season, but that often meant for as much as two months prior to Easter. Since I was in the city of Port au Prince, where there was little open space, we flew from our rooftops; most houses are one- or two-story and flat-roofed. Whole families flew kites from 6 a.m. to 6 p.m. There may well have been 25,000 people flying kites at once.

The kites looked innocent: hexagonal in shape with a simple three-stick, crossed frame, with a bowed stick across the top. Paper for the kite sail was the yellow paper used in Haiti for packaging sugar. Otherwise, old dry cleaning plastic was a second-place substitute. Children used the white sap from the candelabra plant for glue, while adults favored homemade paste made from wheat flour, with secret ingredients from family to family. For the small children's kites, the spars could be made with the center vein of a coconut tree leaf. These were kites that measured about .4 by .4 m (ca. 20 by 20 inches) and larger kites with wooden spars flown by adults were almost twice that size. Creative kites in all shapes were common as well, but the hexagon was most popular and could be made in very large sizes. Behind the cross-stick was a hummer made of paper, folded and pasted over the bow string.

Of course, the kite had a long tail made from old clothing, and it was on the tail that these kites carried their lethal secret. You see, these kites were for fighting, and on their tails was an array of razor blades (don't try this at home, folks) for cutting the line or tearing the sail of neighbors' kites. Often the blades were stuck into a small piece of wood to make a V-shaped barb, or the tail could simply be played through the middle of a double-edged blade.

As any flier who has lost an aerial battle can tell you though, the joy of kitefighting becomes a complete sadness when your line is cut and your kite lost.



The Kites of Haiti

A sky of a matron Clothed in a thousand colors Yellow, red, and blue Grey, green, and white Good fortune and joy scolded the kites.

On the rhythm of the wind The enchantment of the air The fresh morning breeze Dance the most beautiful kites.

As on an enchanted path The wondrous wings A form of a fairy The kites of Haiti Are always radiant Entranced and full of life.

In spite of the misery that runs through our veins The war that brings us so many sorrows At this time of the year all our woes are deposited At the strong-box of the past And as usual Small and large Rich and poor Brothers and sisters Participate in the embellishment of the heavens.

Essay and poem translated from French for the Drachen Foundation by Rebekah Pape.

Jim Day: The Man Who Builds Wooden Kites

Jim Day is one of the stalwarts of the Seattle kite scene. "He's an example of a person who finds kites a perfect focus for his very bright, single focus personality," says Ali Fujino of the Drachen Foundation. "He gives, doesn't take. He is really interested in kites and kite people. He's the all-knowing guru and a great resource."

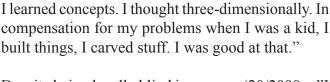
Because he has volunteered as a host for visiting

kite personalities visiting Seattle, often enroute to the annual Long Beach festival or Fort Worden workshops, both among the most renowned of West Coast kite events, he has gotten to know many luminaries from around the world: Trepanier, Fabre, Gressier, Brockett, Yoshizumi, Peters, Wolfenden, Sholz, Skinner, Wharton. He has not only collected their kites but has gotten detailed information on kites and kitemaking from them. "Day teams up with others," notes Fujino. "He makes things happen. He's a good

adviser, good at finding information. He has the kind of sixth sense of the mole which permits him to nose out useful information. He's an able problem-solver. He's shrewd and he's sharp."

These encomiums surprise Day somewhat since he portrays himself in an unassuming light. Born 54 years ago in Seattle's posh Medina section (home to Bill Gates), he was raised in a palatial Frank Lloyd Wright-style house, but a child he was an underachiever in a family of high achievers, father a very successful dentist, mother an artist and collector, two brothers with Ph.Ds and a third an airline pilot.

Jim on the other hand couldn't read well, couldn't write well, had to have tutoring, regularly spent summers in school trying to catch up, eventually flunked out of high school. He remembers: "While I didn't respond to the written word, which is what normal schooling is all about, I remembered things



I was told. I got people's names right on the first try.

Despite being legally blind in one eye (20/2000—"I couldn't walk down the street with it."), Day managed to get himself drafted as a combat engineer during the Vietnam War. "The draft board had a

quota to fill. All you had to be was basically warm to get taken." Vietnam gave Day his first view of kite flying and he liked what he saw. "I didn't pursue the matter at that time, but the seed was sown."

Returning home, Day got a job in a shipyard and discovered he was skilled at "lofting"—conceiving boat plans in three dimensions. "My future was settled. I had found my niche. I built racing sailboats, got to know the international big league racing sailors,

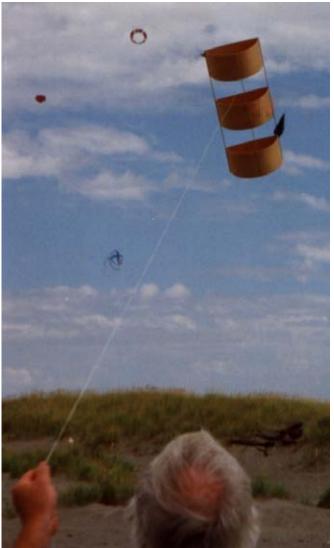
got to deliver boats to Alaska and Hawaii. I was in the center of a glamorous world and it was a wonderful lifestyle for me. I was building people's dreams. It was very romantic."

Building himself his own boat to live on, Day went 12 years without a telephone. While he couldn't receive messages, he could make them. There was a pay phone down at the end of the wharf. Although living a no-frills life, Day was a regular at the Seattle Opera.

Two disasters, a radical downturn in the luxury boatbuilding business and a severe injury to his key right hand when he caught it in machinery, combined to force Day to switch vocations. He discovered cabinetry, a related work at which he was a quick success, setting up his own business. He specialized in custom installations, sometimes taking months to do them, and got to meet major players in Seattle's economic boom. He did installations such as libraries and



Wooden Kites



The launch.....

kitchens for top Microsoft, Boeing and Nordstrom executives, for financiers such as Henry James of Goldman, Sachs, for Gary Larson the cartoonist, and for Kenny G., the pop musician. "I've been in some wonderful houses," he says. "One of them had 25,000 square feet of space."

Day took up kites 16 years ago when his then wife bought him a cheap two-line stunter. Mastering it in an afternoon, he went out the next day and purchased himself a top-of-the- line Flexifoil and was hooked. Soon he was making his own kites, helped by intensive sewing lessons from master kitemaker Stan Swanson, and teaching others how to make them, notably at the annual retreat at Fort Worden, Washington, attended by the elite of the kite world.



.....and lunch.

Since he works in wood, Day made a stir by constructing kites from 1/32nd of an inch birch plywood, with backing for strength and to curb warping. He made a four-foot Edo which was a big hit. "I also made a box kite, which flew great, except it landed like a 747," he says. "Nothing but splinters left."

"I like the esthetics of kites," says Day. "I enjoy the process of making them. You have paper, sticks, string, glue and you make something that flies. It's a kind of magic. There is no limit."

What's in his kite future? "I'm thinking of buying a 4-by-8-foot sheet of 1/8th inch thick plywood, bridling it, and flying it, just like that. It would be an instant Edo. At least that's the plan, the scheme; no, the fantasy. I have a fertile brain—not a fermented one—maybe from my Irish blood. Quite a bit of Irish in fact. I guess I can blame everything on genetics."

So, what about that "underachiever" tag from his childhood. Day decided to find out what it was all about and some years ago consulted the medical world. It turned out he had a form of dyslexia. While a disability in one sense, the compensation of being able to think three-dimensionally has more than made

Wooden Kites

up for the problem, in Day's view.

His interest in kites has taken Day overseas in recent years, to India, France, Denmark, England. He sees another trip, to Hungary, in his future. In the scheme of things, he has become friendly with Istvan Bodoczky, of Budapest, who makes highly creative, beautiful, assymetrical kites that are either artworks, or artworks that happen to be kites. It's hard to tell which. Perfect fodder for Day.

Day has hooked up with the Drachen Foundation as a part time aide, advising, making lightweight rigs for aerial photography for high school workshops, doing the occasional piece of cabinetry work. "I'm just a sherpa," he says. "A valued sherpa," says administrator Ali Fujino, overhearing the comment. Quick on the uptake, Day as usual has the last word, "If they start calling me 'Chips' here, then I'll know I'm in trouble."

Kites are hardly Day's only interest. "In addition to aerodynamics, I'm attracted to all the technical stuff. I build telescopes, do aerial photography, keep my eye on all the latest developments in astronomy, meteorology, oceanography. Most of my dealings tend to be with water and wind—intuitive stuff." So stable in personality he has had only two telephone numbers in his lifetime, Day happily points out he built a saltwater aquarium 14 years ago that still has its "starter" fish alive. "And they're still happy," he



What They Had to Say

"To the uninitiated, kites define lightweight. They hover or they flit about, pushed around by the whim of the wind and tethered to earth only by string or cord. The very act of flying violates today's multi-tasking, Internet-everywhere-anytime pace. To aficionados, though, kites are hardly kid's stuff. They represent ingenuity, patience, skill, a connection to the natural world. Kites are, or have been, used to sail, surf and ski, celebrate and spy, worship and make war, catch fish, monitor bats in flight, pull buggies, communicate across oceans, measure atmosphere, compete, photograph. There are box kites, soft kites, art kites, leaf kites, singing kites. Some kites are so big they take dozens of people to hang onto them, and some about the size of a penny. It's a scientific, historical, artistic, and sometimes bizarre world."

Times

On seeing a *chataigne* (cousin of breadfruit) leaf kite she and friends made in Trinidad soar into the air: "In flight, the *chataigne* leaf kite rose swiftly and steadily as its diamond shape suggests. The visual impact of the kite aloft was something quite beyond what we had anticipated. The kite was a visitor from our prehistory—a moving evocation of primordial human intelligence at play with nature."

Judith Johnson, Garden City, New York

"Kites provide a dialogue with the changing moods of the wind in space; and this makes the emotional subconscious react in joy and freedom."

Joan Moncado, Barcelona,

Richard Seven, Seattle

Spain

On the real meaning of kiting: "Kites transcend the material world. They are more than the sum of their parts. Kiteflying is a window to other cultures, where you are received as a peer. You and other fliers meet on common ground—literally."

Tom Casselman, Portsmouth, Rhode Is-

The Lure of Collecting Kite Stamps

"There is a fascination in collecting kite stamps and first day covers." The speaker is Scott Skinner, president of the Drachen Foundation and a leading collector of kites and kite memorabilia. "You have a huge variety of types of kites, you have the puzzle of understanding the motivation for using a kite as the image, and you have the pleasure of the unexpected—of finding a kite picture where you don't expect to find it. For a collector, it has all the lure of the hunt."

It's not a large field. Skinner, of Monument, Colorado, has 106 stamps in his collection, with some duplication from first day covers. He believes this is some 95 percent of the total global output. "There isn't much information about kite stamps available," says Skinner. "The topic doesn't show up on the philatelist radar screen."

Collecting kite stamps is a fairly low-cost hobby. Skinner says the average price might be \$2. The single most valuable stamp, perhaps available in the neighborhood of \$35, is a Thai issue showing a traditional aerial fight between male *chula* and female *pakpao* kites.

"The very subtle, very nice," in Skinner's words, two *baht* stamp was put out in 1966. Skinner's stamp is canceled because it was used in the mails. "Esthetically it would be nicer if it were not canceled," he says.

No l9th century kite stamps were issued, to the best of Skinner's knowledge. He finds this surprising, considering the amount of interest in kites generated at the end of the l9th century. The oldest stamp he has is a May l914 issue, probably German, showing a boy and girl flying a kite. It's an attractive stamp. The boy is shown wearing white shorts, the kite is orange, the background is blue. The stamp seems to convey a theme of life, spirit, happiness.

Another frequent theme is an ethnic one, represented by a new Hong Kong issue of traditional Chinese

kites.

A third is the anti-drug message. Flying kites is seen to be clean and innocent, in contrast to the degradation of drug-taking. Showing this theme clearly is a Malaysian two-stamp issue. The downbeat bottom stamp shows a boy using drugs, the upbeat top stamp shows a boy flying a kite.

Disney images on kites show up from outlandish places, such as Granada in the Caribbean and Gambia in Africa. The message is: kites are a carefree activity for the young. Third world stamps are often actually produced in the first world and sold to the poor countries that issue them, for moneymaking purposes at both ends. Kites are hardly a national sport anywhere in black Africa, yet Ghana, Mozambique, Uganda and Equatorial Guinea have issued kite stamps.

Hewing more to tradition, most Asian countries have issued kite stamps, "with Korea being the holy land," says Skinner.

Other themes are observable. Commemoration is one, exemplified by a 1979 Mongolian stamp honoring the Russian A.F. Mozhaiski, a flight pioneer. Skinner's example is found on a first day of issue cover which has as a wonderful cachet, or image, on the left side of the envelope, a picture of a man-carrying glider being towed by horse and wagon. "If towed," Skinner notes, "the glider becomes a kite."

Kites represent promotions too. An example is a German issue of 1994 showing Wolfgang Schimmelpfennig's fearsome *Big Boss* in flight. The stamp advertised a kite festival at Lunen. Schimmelpfennig, of Hamburg, is a member of the Drachen Foundation's advisory board.

Kites as utilitarian objects is the theme of a French issue of 1986. It shows weather kites in use during an Antarctic expedition by Gallic explorers. Another stamp in this category is one issued by the island of Palau; it shows the primitive art of kite-fishing.

Collecting Stamps



Skinner's personal favorite: a Southeast Asian rice paddy scene.

Skinner's favorite collectible? "That's easy," he says. "It's a first day cover marking the 40th anniversary of the World Federation of United Nations Associations, put out in November 1984, as part of a four-stamp issue. The kite image shows a Southeast Asia rural scene: two water buffalo and nine people planting rice in a paddy, with six kites flying overhead." The beautiful watercolor was done by Chinese-American painter Dong Kingman, of New York City.

There is, by the way, only one United States kite stamp "and it's an American cliché," says Skinner. "It reproduces the famous Benjamin West painting of Benjamin Franklin's experiment with electricity. This is, maybe, my least favorite kite stamp."

The Franklin experiment shows up on three first-day-of-issue envelope cachets. In these instances, the



A 1914 stamp is the oldest in the Skinner collection.



A dramatic Mongolian first-day-of-issue cover shows a man-carrying glider being towed as a kite.

Collecting Stamps



Despite cancellation mark, this subtle Thai stamp is costly to buy.



In this Palauan issue, a primitive leaf kite is being used for fishing.

stamps themselves don't show a kite but the cachets do. Another example is the Hargrave stamp of 1983 from Australia which shows a flying boat, while the cachet pictures kites and a glider. A third example is the first day English cover for the 75th anniversary of Marconi's first, short range radio transmission across water on May 11, 1897. "Are you ready," was the message. Although the stamp itself shows equipment used in the transmission, the cachet includes a map of the Bristol Channel transmission route, as well as one of the kites used in routing the signal.

To add slightly to the dimension of the hobby, there is a third category of philatelic collecting—postmarks, which may have kites in them as decorative elements. A Korean cancellation mark showing a kite and flowers has as its apparent symbolism playfulness, regrowth, the heralding of spring.

Kite images are found on postcards, book prints, Japanese woodblock prints and on ephemera such as porcelains, glassware, figurines, jigsaw puzzles, telephone cards (Skinner has some 100 of these), tapestries, quilts, tee-shirts, books and printed matter. "I have three bags full of printed matter and that's

not an exaggeration," says Skinner. The collector does draw the line somewhat at posters. "I have lots of them and they're easy to carry home from trips. But for some reason they don't excite me."

Skinner collects the items listed above as a complement to his trove of prime historic and contemporary kites from around the world. "They add dimension and context to exhibitions of kites the Drachen Foundation and I jointly organize," he says.

Skinner was introduced to kite stamps in 1990 by Jan Fischer, of Vogelsang, Holland, and Michael Alvares, of Perth, Australia. He says he has been helped by a small personal catalogue published by collector Russ Mozier of Glassboro, New Jersey. He notes that "If you put your feelers out, you can collect a lot of stamps in a hurry. Friends find them, sometimes they show up on Web auction sites. One advantage to stamp collecting is they're eminently portable and easy to store. Another is they fit most people's budget. A lure is their trading potential. Trading is usually on a one-to-one basis."

One stamp in Skinner's collection leaves him puzzled. It's an Australian issue from 1995 titled *Kiteflying*. Reproduced is a painting by the noted Anglo-Australian artist Ian Fairweather. "The problem with this image is it's completely abstract, there is no kite to be seen," says Skinner.

Master Japanese Kitemaker Remembered

Editor's note: Following is a reminiscence on one of the last master Edo kitemakers by Masaaki Modegi, Japan's preeminent kiting personage. The following is excerpted from Modegi's essay *Early Kites and Kitemakers* in the book *Kites: Paper Wings Over Japan* (Thames and Hudson, New York, 1997).

By Masaaki Modegi

Hashimoto was born in Hikifune, Mukojima, Tokyo, in 1904. When he was four years old, his family moved to an area behind the Shimotani Shrine in Ueno. Having been born into a family of kitemakers, Teizo began to help with the family business while still in elementary school. While he learned the tricks of the trade from his father Tomekichi and his step-grandfather Fusakichi as he grew older, it was through his own concerted efforts that he secured his place as the third generation of this traditional Edo kitemaking family. Though Edo became Tokyo, there was no change in the status of kiteflying: kites were flown in the older downtown district as well as in the newer, highbrow uptown Yamanote area. At this time, many kitemakers were still left.

When he was younger, Hashimoto's father worked for Hasegawa Shoten, a maker of seasonal goods whose business was located on the banks of Yanagihara in the Kanda district. There he made carp banners for Boys' Day on May 5, fans for the hot summer months leading up the Festival of the Dead, and kites. The resident artist was Yoshitoyo Utagawa, whose son Umemitsu was exercising his expertise on kites. He also had a friend, Sakamoto Fusakichi, a dyer by trade, who applied to paper the stenciling techniques originally used on cloth. Whereas India ink prints had heretofore been colored by hand, this innovation allowed for the efficient mass production of multicolored kites.

Soon after the war, in 1956, Teizo Hashimoto married Kiyo, two years his senior. She worked so hard alongside her husband that she soon developed calluses on her left hand, and yet all the while she managed to handle both the business and household affairs for this consummate craftsman. The entire first floor of



An elegant Edo Ji-dako letter kite by Teizo Hashimoto.

their home, a two-story wooden structure build in the old-fashioned syle, was a dedicated workshop, complete with a gap in the wall through which to sweep out the dirt. Not only was this convenient for cleaning, it also improved the ventilation in the summer and could be closed with a small door during the cold winters. This gap was also used as an entrance by the cats, which the Hashimotos, who had



Hashimoto's rendering of the Yakko kite theme.

no children, treated lovingly as members of the family. I witnessed numerous occasions when the cats would paw at a ball of kite string or walk over the kites—all without a word of rebuke. On the workshop floor were scattered old paintbrushes, cans full of painting equipment, cutting boards, and Japanese paper, and overhead, above the bamboo, completed kites were visible. Realizing that among these items were some that had been used by all three generations of this family of kitemakers, one could not help but feel the weight of history.

Some of these things are on display, along with the kites, at the Tokyo Kite Museum. These kites are a piece of the common man's culture from the Edo period, a 300-year stretch where the nation remained secluded from the outside world and developed a pure and uniquely Japanese culture.

Of the 37 master kitemakers before the war, there remains today perhaps but one. Though it is sad to think that men like Teizo Hashimoto, deceased in 1993, whose life was devoted to the Edo kite, are now gone, it is comforting to remember that both his works and photographs of them remain with us today, serving as models for a new generation of kite builders from all over Japan.

'Distant Music of

Harps

Editor's note: James Abbot, a British army officer, published his Narrative of a Journey From Heraut to Khiva in 1843. Khiva is on the Oxus River, south of the Aral Sea in Central Asia, in a region then called Transcapia. Following is an excerpt from that book.

"As we entered Khiva, we heard a pleasant melodic sound, resembling the distant music of a hundred Aeolian harps. Seeing some children on the road with their paper kites, I approached to examine the contrivance by which these toys emit a musical sound whilst floating in the air. The kite is square, formed upon two diagonals of light wood, whose extremities are connected by a tight string, forming the sides of the square. Over the whole, paper is pasted. A loose string upon the upright diagonal receives the string by which the kite is to be held, and a tail is fastened to the lower extremity. The transverse diagonal, or cross-stick, is then bent back like a strung bow, and fasted by a threat or cat gut. Of course, every breeze that passes the kite vibrates this tight chord, and the vibrations are communicated to the highly sonorous frame of the kite. And, as numbers of these kites are left floating in the air all night, the effect is that of aerial music; monotonous, but full of melancholy interest."

The Kite

Out of the hand and into flight, Its colors brilliant and bright.

Flashing cheerfully in the sunlight, First to the left then to right.

Dipping and darting, pulling the string tight. Tugging and pulling trying the reach great height.

Dancing with the wind, what a beautiful sight. Watch a kite while it's in full flight.

Violence Delays Project In Philippines

Terrorism in the Philippines has forced Orly Ongkingco of Manila to temporarily halt his research on kites throughout the archipelago. Ongkingco was the recipient of a grant from the Drachen Foundation to document the broad-spectrum kite culture of his country—the various types of kites, their makers, raw materials, tools, history, mythology. He was not only charged with doing written research but also with making photographs, as well as collecting choice examples of kites.

This is one of several Drachen country projects in effect currently. Other important ones are now being conducted in Cambodia and Guatemala.

Because the Philippine culture apparently began in the south, at Mindanao (where Orly was born and raised), he began his study there in early October. He was on Siargao Island doing his first interview when Moslem rebels set off a bomb in nearby Zamboanga which killed several people and injured hundreds more. "Mindanao is a hotbed of the Moslem rebel movement," Orly observes.

Because of security precautions, Orly says he had terrible problems with kite baggage in airports. He

was not allowed to carry big kites in his luggage because they wouldn't fit into the x-ray machines and the smaller kites worried officials who pointed out the sharp-pointed bamboo bones could be disassembled to become deadly weapons.

Orly left the south just before the Philippine military attacked a rebel camp. This served to scatter the terrorists over the area and they took civilian hostages to protect themselves. In exchange for the hostages, the military permitted the rebels to escape to the mountains.

"I don't want to alarm you," says Orly, "but the present situation has affected my research. I canceled several in-country trips and thus my research timetable has been disrupted. I'm still traveling—but out of the country, to Hong Kong and Johor, Malaysia, for festivals. And I'm planning a trip to Nanjing and Weifang in China in April.

"I'm sending on my partial report, along with slides, maps and other material, but will continue the research project at a later date, when things calm down here. Best regards."

Dangerous Kites

Because of an increased use of metallic wire with nylon cord in flying lines, kiteflying with such equipment has recently been forbidden in the Punjab of Pakistan. Loss of lives and damage to household appliances because of electrical shorts caused by these dangerous kites was cited for the new law. A fine of 15,000 rupiahs or imprisonment for three months are the penalties to be imposed for contravening the ordinance. The Pakistan Cabinet was assured by Brigadir Ejaz Ahmed Shah that if the perilous kiteflying was taking place in a location where women were in purdah, or seclusion, arrests would only be made by "a lady councillor and a Grade-17 female government officer, upon giving the occupant notice to withdraw from her place." The government emphasized the law "does not intend to stop the exuberance of the general public, rather to have a deterrent impact since it aims at saving private and public properties from damage and loss of human life through the prohibition of harmful kiteflying activities."

The Nation, Lahore

<u>Knotty Attribution Problem</u> Was the Sled Kite Invented in Europe?

Of the fewer than a dozen basic, or generic, kites extant in the world today—the number is a source of contention—the Sled is one of the most popular. It is easy to make and a good flier.

It is credited to William A. Allison, of Dayton, Ohio, an aeronautics prodigy, who at the age of 13 received the run of the shops at Wright-Patterson Field from admiring workers there. Allison made model aircraft famed for their craftsmanship, according to writer and kite expert Tal Streeter, who has done extensive research on the inventor. Allison is credited with having invented the radical Sled in about 1950 and he received a patent on it in 1956. It was the first semirigid kite ever patented. But it wasn't until the Scott family of the same city marketed a kite known as the Scott Sled, with a vent added to the design for better stability, that the design became globally famous.

This origin of the Sled is now challenged by a discovery made by Istvan Bodoczky, of Budapest. Bodoczky is both an artist and a kitemaker, renowned for his assymetrical kites. While doing kite research, Bodoczky came upon an article titled *Games and Toys of Children in the Capital* in the January-February 1904 issue of the Hungarian Ethnographic Journal. In the article, a "Buda Jewish kite," complete with drawing, was discussed by one Zsemley Oszkar. "This is without question a Sled kite," says Bodoczky, and the drawing in the journal (here illustrated in an accurate copy) seems to bear him out. The design was obviously already old by 1904, when the essay was published.

To explain the name of the kite: "Buda" is that portion of the city of Budapest which lies on the hilly, west bank of the Danube and the "Jewish" refers, Bodoczky believes, to the probability that the kite was customarily made from accounting papers trashed by Jewish shopkeepers and retrieved by boys for kite building. Paper was of much greater value than it is today. "We know from a Hungarian poem written at the turn of the l9th century," Bodoczky says, "that kites were often made by pasting pieces of paper together. The poem conveys this in a metaphorical way: 'There flies a piece of poetry, a bit of music, remnants of a love letter...'" Thus, the Buda Jewish kite may well have been constructed with joined-together sheets and, as a consequence, been substantial in size, stiffness, and weight.

Scott Skinner, president of the Drachen Foundation and a recognized authority on kites, comments that the Hungarian kite "certainly appears to me to have the Sled form, and my only quibble would be that the drawing of it apparently shows a paper kite rather than a truly 'soft' kite. If it's paper, I think there is a legitimate argument that it's not really a soft kite (spars in only one direction and held open or rigid by the wind) as is the case of a true Sled, but rather, a rigid form that holds its shape due to the stiffness of the paper and not the force of the wind."

Writer Eden Maxwell is to be thanked for turning up this interesting Sled anomoly. He learned of Bodoczky's previously unpublicized find while conducting research for an Encylopedia Brittanica essay on kites.

Maxwell comments on Skinner's view: "If the kite has the prerequisite spar along each keel line (and that's it) as the structure, then we have a kite getting at least some shape from the wind. How much flexibility would depend upon the paper used at the time. A precursor Sled form is definitely there—in shape if not yet in design. Similar forms and inventions do evolve independently and spontaneously at different times and in different parts of the globe. If you take a moment and look on Page 33 of David Pelham's *Kites*, the untrimmed version of the Conyne kite seems to have kinship with this curiosity from Hungary." In his Britannica discussion of the Sled, Maxwell calls it a "thermal soarer." He adds: "Being semi-rigid with no lateral stiffeners, the kite's flexible canopy, or sail, adopts a negative dihedral angle, providing lift in light steady winds. The kite, however, can easily collapse in crosswinds....Deft jiggling of the flying line may let the kite catch the wind again, right itself, and regain altitude."

Noting that there are now many variations of the Sled, Maxwell says that "For increased stability and better performance in a wider wind range, some Sleds have three vertical longerons (one along the vertical center), multi-legged bridle schemes, various type vents in the canopy, even tails." The Sled has clearly come a long way.

But, a nagging, probably never-to-be-answered question remains at this point. When and where and by whom was the Sled actually invented? If the Budapest version is really the first of the breed, and this of course remains questionable as the above comments indicate, did Allison somehow, in some way learn of it? Or did he independently invent his Sled? Considering his aeronautical credentials, the last would seem by far and away the best guess. A retrospective tip of the hat to William A. Allison seems very much in order.



The Buda Jewish kite of 1904, in an accurate rendering from the original text by writerartist Eden Maxwell. This early Sled-type kite was made of paper, sticks, and twine and was flown with a tail.

Attribution Problem

Noted Kite Historian Responds

Editor's note: The author is presently working on two books from which this material is drawn. They are Domina Jalbert, Brother of the Wind and Great Kites of the Western World, which includes chapters on the men he considers preeminent in 20th century American kiting—William Allison, Francis Rogallo, and Jalbert, inventors of the Flexible (Sled), ParaWing, and Parafoil kites, respectively.

By Tal Streeter

More than might be imagined, it is a commonplace for there to be conflicting claims regarding the primacy of invention in the field of kites, flight...and all inventions. These contests of authorship tend to follow a pattern and reflect attitudes reminiscent of the information recently presented by Istvan Bodoczky, who has raised a question concerning the origin of the Sled kite. The 1904 Hungarian ethnographic journal he enters into evidence includes a description, accompanied by a drawing, of a "Buda Jewish

Historian Responds

kite" remarkably similar in its appearance to William A. Allison's Flexible kite known worldwide as the Sled kite.

Like everyone else, I have trouble sorting these conflicting attributions out myself, but a review of the many similar instances, which parallel the newly raised Buda-Sled question may contribute perspective to a subject frequently confronting the kite community.

A mountain of conflicting claims also surrounded the Wright brothers' invention. It was years before the brothers won general acknowledgement for achieving the first human-operated powered flight. Among countless claimants, the Smithsonian touted their man, Langley, who visited the Wrights in Kill Devil Hills, gleaning what he could from an inspection of the Wrights' work before it was widely published. The first person killed as a passenger in a plane (a Wright Flyer piloted by Orville) was a member of Alexander Graham Bell's airplane design team, sent for a first-hand look to gather information on the Wright plane. Before they joined forces, forming the Curtiss-Wright aeroplane manufacturing company, Curtiss "borrowed" crucial elements of the Wrights' unparalleled work, raining on what might have expected would have been celebration parades. It's a notably large and dark cloud cloaking this biggest star in the history of flight. And it hangs over the Wrights to this day. Professor Hiroi, as only one example, gives a long, entertaining lecture on a Japanese man who he claims, quite seriously, invented the airplane long before the Wrights did.

Moving on to the theme of kites: The first archetypal "American" kite was William A. Eddy's diamond two-stick. Did it in fact originate with Eddy? One would be excused at wondering if Eddy hadn't drawn heavily on an Indian-style fighting kite, known in our time as a Malay kite. Eddy, in fact, saw a group of Malay kites in the Java pavilion of Chicago's 1893 Columbian Exposition. In the Western world, Eddy's "bowed" diamond two-stick became the second generic kite, following the "flat" kites flown throughout the world. The Eddy kite frame was quite rigid, unlike the more flexible Indian-Malay-Java

About the Name 'Sled'

Since the Sled kite on the ground or while flying does not look like a snow sled, where did the name come from?

Eden Maxwell, in his book The Magnificent Book of Kites (Sterling Publishing: New York), gives the following explanation. Although William Allison received a patent for the kite, it wasn't until fellow townsman Frank H. Scott and family began building and marketing the Scott Sled variation that the kite became popular. The Scotts, according to Maxwell, felt the kite was polymorphic, or "very flexible," and it flew, "making it a Flexible Flyer, a brand name for a sled, known to most children in snowbound states."

"It had never occurred to Scott to call his kite a Sled because of its airborne shape," adds Maxwell.

An ingenious explanation.

version, but he covered his kite frame with a looser fabric, producing a dihedral effect similar in both the Malay and his kite. The flight stabilizing effect of a dihedral was indeed a major aerodynamic improvement, recognized by our foremost kite historian, Clive Hart, as a milestone in kite history. With the exception of Indian-Malay-Java kites, flexible in both frame and cover, to all intents and purposes flat kites, East and West, required tails to achieve stable flight. As an element worthy of note, I would draw attention to not only Eddy's recognition of the dihedral, but the looser cover as well. It would be nearly a hundred years after Eddy's work that cover and bone "flexibility" was identified by Rogallo as a characteristic enabling a kite to adapt to varying wind conditions-and still later recognized as a feature invented by nature, the fine tuning wingtip feather of birds. Eddy filed for a patent Aug. 1, 1898; the Columbian Exposition opened its gates to wide acclaim in 1893. Eddy's patent No. 6446375 was granted March 27, 1900. There is definitely a story worthy of attention here, but with the dates sorely in need of sorting out. Ed Grauel, the kite patent authority, adds a useful phrase to the terminology of invention originality. He characterizes the Eddy kite as a "reinvented kite." This is an entirely reasonable notion, but not one, unfortunately, to be found in U.S. Patent Office canons. U.S. Patent Office patents validate the uniqueness of original inventions. Thereafter, improvements or variations—lineage—is generally, but not always, spelled out.

Continuing with more general examples of this issue of originality:

Stepping back in time looking for basic research and inventions critical to the history of flight: a toy capable of helicopter-like flight made by Launoy and Bienvenu in 1784 (incorporating real feathers) was acknowledged by Sir George Cayley to be of great importance. Cayley, often described as the father of flight, credited the feathered toy with leading him to his seminal research on the actual nature of aerodynamic lift.

Francis Rogallo

To do justice in a brief outline to Francis Rogallo's seminal inventions is a challenge of the first order... Rogallo's ParaWings (Flexikites) were first marketed as toys; the ParaWing, adapted with rigid spars, accommodated a buggy-like passenger rig Rogallo developed for NASA. Tests under Rogallo's supervision at Langley led to Rogallo's recognition as "the father of modern-day hang gliding." This same ParaWing flying buggy version, for some, anoints Rogallo as the inventor of the Delta kite; and in still more recent times, his full-blown totally soft NASA flexible-wing (designed as a parachute, but also flown by Rogallo as a kite) has been reworked as the NPW-5 ParaWing (based on the fifth of nine original Rogallo NASA ParaWings). With fans flying NPW-5s worldwide (me included; I own two), the excitement of another NPW on the drawing boards (see website www.NPW-5.com) is palatable.



Francis Rogallo shows off the original Flexikite, made by his wife from a flowered chintz curtain. It still flies very well.

The Delta kite a Rogallo invention? My thinking leads me in that direction, but there are many attributions vying for the Delta laurel leaf. Details are far beyond the scope of this brief review.

In the matter of degrees of rigidity and flexibility, Rogallo's early kites, as I understand them, were made of a variety of materials, from semi-rigid plastic sheets to completely flexible soft fabric; both materials were shaped to develop aerodynamic lift and strong keel configurations. In the fully soft fabric kites, the NASA ParaWings, the shape is created by wind filling the fabric, cut and sewn into a lifting chord whose shape is maintained and enhanced by the positioning and lengths of the bridle lines.

I've been led to believe that a fair amount of evidence exists to claim that the little paper kite, the *chiringa*, is recognized as a children's kite native to Puerto Rico and Greece. A case might be made the *chiringa*'s resemblance to the concept behind the first Rogallo kite models (and that of William Allison's Sled as well). Gertrude Rogallo, whose name appears on the original Rogallo patent along with that of her husband, made their very first Flexikite from a flowered chintz curtain. Subsequent versions were made of similarly stiff plastic storm window screen-

Historian Responds

ing. These kites bear a passing resemblance to the attributes of the surprisingly prescient *chiringa* toy. A "reinvention?" How about this attribution? I for one am not prepared to press a Buda-inspired claim for an earlier attribution. Rex Zachery would know more about this than I. He was granted an American patent for a *chiringa* look-alike in 1961. My sincere apologies if I've overlooked his contributions to the exceptional kite described in his patent—one I've taught in countless workshops, one of my all-time favorites.

Domina Jalbert

Throughout his lifetime, Domina Jalbert's rightful claim of invention was constantly under siege. Variations, improvements on the original Jalbert Parafoil patent? Absolutely. Fine by me. Would, however, that the vast range of "cell," air-inflated kites (and their brothers, the Parafoil-Paraglider wing and parachutes based on Jalbert's Parafoil invention) were identified as "something or other Jalbert-style Parafoils," variants on the primary Jalbert invention. It's complicated, though: I did a great deal of research on the Andrew Jones and Ray Merry Flexifoil, and there's not a question in my mind that their invention, as remarkable and unlikely as it seems, came about independently of Jalbert's.

I take some personal pride in having recently brought recognition to Jalbert among the Paraglider community flying Jalbert-variant wings in France. Jalbert's name was totally unknown there, a crime it seemed to me, virtually within Jalbert's lifetime.

William A. Allison

Allison is the least well known of America's three kite giants. Growing up and living his entire life in Dayton, he was a brilliant student of flight. At the young age of 13, recognized by the flight officers and mechanics at Wright-Patterson Field as the creator of meticulously detailed model airplanes, he was given the full run of their shops. The U.S. Patent Office held up both the Allison and Rogallo patents several years in the early and mid-1950s in consideration of the remarkable similarities underlying their flexible kite applications. Allison's application was filed while the Rogallo claim was under review (of course completely unknown to anyone outside Gertrude and Francis Rogallo and the Patent Office). The Patent Office was astounded at the similarity between the two. Unkown to the patent examiners, of course, it was all the more astonishing in as much as Rogallo held a Ph.D. degree in aeronautical engineering and was director of the large-scale wind tunnel at Langley Research Center, a NASA affiliate, while Allison was a blue-collar refrigerator mechanic working for the Westinghouse factory in Dayton.

Allison's patent application was filed Sept. 8, 1950. His patent No. 2,737,360 entitled Flexible Kite was finally granted on March 6, 1956. The long delay must have been disheartening, but from that point forward, the going got rockier for Allison. His kite languished until 1964, so the story goes, when one of his kite experiments, a kite lost in flight, was picked up at the curb of a Dayton street by Frank Scott. The Scott family was the owner of a prestigious Dayton department store, skillful at marketing. The family copied the Allison kite, adding a vent, and sold millions to chain stores as advertising premiums. It was several years before Allison, still completely unknown even to the kiting community, won a civil cease and desist order and a small sum of money for the infringement of his patent.

I very much appreciate the Scott family's poetic creation of the name Sled—based on the Allison kite's resemblance to American's much beloved Flexible Flyer snow sled. I can't help but wonder if the Scotts' checking out of patents didn't trigger their inspired poetry. Nevertheless, coupling it with the child's Flexible Flyer snow sled was a lovely touch. I also appreciate that the Scotts were instrumental in making Allison's kite one of the American public's kites of choice. Alongside the Eddy-Malays and the Deltas, the Allison Sleds were recognized by several generations as a quintessential American kite. Would, however, this have been accomplished under the name the Allison Sled with Scott adaptations, a variation on the original.

Maybe this is yet another example of the acceptance

of ghostwritten books and speeches (are there any politicians and CEOs in our time who actually pen their own words?). As Harry Truman observed, "You can accomplish anything you want in life, provided you don't mind who gets the credit."

The Buda

Now, in the first months of 2002, the Hungarian Buda kite is raised as a candidate for designation as the first Sled kite. Scott Skinner draws attention to the degree of rigidity represented by paper kites (the Buda was made of sticks and paper) as something distinct from a truly "soft" or "non-rigid" cloth kite shaped by the wind. This is a fine point, but considering it, paper along with cloth might be seen as subcategories of "flexible." Allison's kite, of course, is generally acknowledged as the first semi-rigid kite, while it was the Rogallo Flexikite that was recognized by the U.S. Patent Office and subsequently accepted as the first "soft" kite. Even this simple point, as Scott Skinner's attentive observation suggests, is clearly a tricky issue.

Anything and everything, I guess, is possible. But for me, in a nutshell, it is a million to one shot, an impossible stretch for me to imagine, that Allison somehow had knowledge of a turn-of-the-19th-century Hungarian kite. Again, wishing to sort this out, putting it into perspective: Absolutely, the Buda kite has a rightful place in the long history of kites. Thanks so much, Istavan Bodoczky and Eden Maxwell, for bringing the Buda into the fold of the "firsts."

But, carrying it too far, we play in the hands of an all too common inclination for obfuscation, unable to see the forest for the trees. I fear that the complexity and uncertainties of sorting out a confusing welter of details creates a situation where the world's greatest kite inventors are denied a rightful position at the pinnacle of this great pyramid of kites. It is not just the intimations of a "first" which results in our esteem, but a more comprehensive understanding and application, the discovery of underlying principles contributing to what we might identify as our contemporary geniuses at work in the kite's on-going evolution. Let me conclude with a thought, which may seem contradictory to all I've just said:

I revel in my personal delight, imagining the "first" kites. Yes, I'll agree. The newly rediscovered Hungarian Buda kite merits a prominent place in the kite hall of fame. Maybe in this first category we may also place the chiringa. And in a special category, where evidence is more wanting, the Chinese farmer's straw hat conjured up in our imaginations flying off on a long string. We can add another quite plausible "first kite," imagining a tattered piece of sail cloth whipping in the breeze at the end of a woven grass line, taking flight from an Indonesian-Malay-South Pacific catamaran. And our imagination enhanced by the evidence remaining in modern-day Indonesia, the first "bowed kite," the naturally bowed orchid leaf kite flying out from the island fishing boats. I envision these first kites-made by our nameless kite-making, kite-loving ancestors-as lying deep within our collective consciousness, their kite lines connected to ours in some indefinable manner, stirring our minds-kite enthusiasts, kite inventors, kite lovers, aeronautical geniuses. All, awaiting the pleasures of a fuller understanding. I respect and cherish these nameless ancestors with all my heart. But, let's keep at the forefront of these deliberations the realization that we have entered a time and area way short on facts.

I am a member of the camp that believes these past events, wrapped in shadows, are constantly undergoing review, constantly in flux. "History" evolves; flowing alongside the present, ever changing its shape as new evidence as well as new knowledge is brought to bear on the "facts" of the past. It's true that two people viewing the same accident as often as not come up with widely divergent interpretations, but I tend to believe my own eyes, my own ears; hearing the explanations, giving some weight to a more verifiable present; measuring the skid marks, noting down relevant details while they are still relatively fresh-acknowledging the endorsements of bodies of impartial contemporary authorities, government, and private individuals, who have subjected new inventions to rigorous reviews for "newness," testing and evaluating claims.

Finally, to bring these thoughts to a close: When I fly kites, I find myself living in the past and the present. My kite's string connects me to the clouds, the weather, the universe; friends and strangers as one. I smile at the thoughts engendered by a kite flying in the moment of the present, at the same time pondering the rich associations between past and present, this magic string joining us through time; these friends and strangers at my side—Jalbert, Allison, Rogallo, that Hungarian flying his Buda, the Malay, the Indian, and all the rest—all wearing the kite smile; charmed, marveling at this phenomenon; then as now, and into the future, the promise of life rich with the special wonder of kites and kite flying.

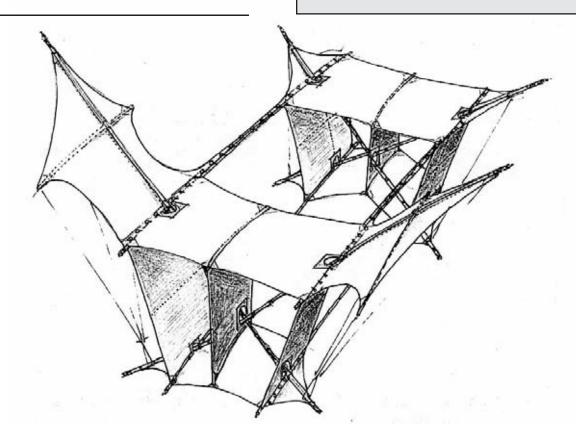
Copyright Tal Streeter 2002

Teensy Kites

It doesn't seem possible, but Dr. Devinder Pal Singh Sehgal of Chandigarh, India, has managed to make kites so small they pass through the eye of a needle. The kites measure 2.1 by 2.1mm (.08274th of an inch), he says. Dr. Sehgal claims his kites set a record for tiny. Any competition? As Ali Fujino, administrator of the Drachen Foundation, says of this curiosity, "I love this stuff. India needs more cable TV. These people have too much time."

"Like a kite, grounded but soaring to the skies."

New York Times headline



Devoting himself with great energy to the historical re-creation of kites from the golden age of the early 20th century, when they paved the way for manned flight, Jan Desimpelaere, of Wevelgem, Belgium, uses the fine hand he developed as a professional landscape designer to here render a classic Samuel Cody Storm kite. The detailing of the beautiful kite is fastidiously and accurately rendered. Besides which, the drawing is a work of art all its own.

Essays on Kite Word Origin and Patents

By Ed Grauel

Origin of the Word 'Kite'

To the best of present knowledge, the word "kite" stems from the Old English "cyta," meaning a bird of prey of the hawk family and distinguished by long pointed wings and a forked tail. The bird was also called a "glade" in England and was fairly common there during the Middle Ages.

According to Clive Hart, the first use of the word "kite" in print to represent a heavier-than-air craft, designed to fly on a tether line, was in 1635 in a book called *Pyrotechnia* by J. Babington. Since the word was used without any explanation, it may be assumed that it was familiar in England for some time before this date. Between 1430, when the first full description of a flying object was rendered in English, until 1635, it had been variously called "flag," "flying dragon," "comet," "flying sail," and "drake."

A few languages, other than English, also use some type of bird to represent what we call a kite, but a translation of the word "dragon" is the most common designation.

While the "e" in kite is not pronounced in English, by rules of pronunciation it indicates that the vowel between "k" and "t" is prounced as a long "i."

The First Kite Patent

Seventy-six years after the United States Patent Office was established, the first patent for a kite was issued, on Jan. 2, 1866, to Thomas Perrins, of Philadelphia.

The patent covered a six-sided hexagonal kite with a spreader connecting the two lateral corners, plus two curved masts, fastened together about one-third of the distance from the top, to connect the top and bottom corners. Why the masts are curved rather than straight isn't mentioned in the patent. As a matter of fact, no claims for the value or usefulness of the idea are made, possibly because this was the very first application for a kite patent and no precedents were involved.

A similar kite, but with straight masts, was evolved at the Kew Observatory in England in 1847, for the purpose of carrying meteorological instruments aloft. This was called the Birt kite, although later the hexagon-shaped kite became known as the "barndoor" or "house" kite.

Obviously the U.S. Patent office did not know about the Birt kite, otherwise a patent would have been denied because of prior art.

Search Words for Kite Patent Descriptions

Editor's note: The author emphasizes that the following is his own concept.

1. Generic Kites

Flat. Plane-surface kite with two dimensions, vertical and horizontal. Includes two-dimensional kites which may bow rearward under wind pressure.

Bowed. Any kite which has wingtips rearward from the center mast and with the bowing maintained by means of a bow string or other fixed means.

Box. Cellular kite with three or more sides held open by means of struts, or by wind pressure, on one or more of the sides.

Keeled. A kite which has a third dimension protuberance usually at right angles from the face of the kite, to which the flying line is attached.

Parachute. A flexible umbrella-like canopy with multiple shroudlines attached to the edges, held open

Ed Grauel Essays

by air pressure.

Sled. A rectangular canopy, with usually two or more vertical struts, held open by air pressure to form a semi-rigid kite.

Parawing. A nonrigid kite of two or more conic sections and a simulated keel, formed by use of flexible material and multiple bridle lines which hold the form in shape under wind pressure.

Parafoil. A nonrigid kite with a frontal canopy and rear air channels, which provide vertical stiffening.

Rotor. A rigid wing or cylindrical surface acting as a continuous-revolving rotor, plus one or more disks secured to the rotor to achieve stability. The kite rises as a result of the Magnus Effect (think baseball curveball).

Autogyro. One or more horizontal propellers on the shaft connected to a fuselage.

2. Shape of Kite

Arrow, bird-shaped, butterfly-shaped, circular, concave, delta-wing, diamond, 5,6,7,8-sided, half-diamond, oval, pot-shaped, rectangular, shield-shaped, square, star-shaped, triangular.

3. Type of Kite

Airplane-type, canopy, control, fighter, flying saucer, folded-paper, glider, hang glider, multi-line, rotating, rocket, tetrahedral, trihedral, winged box.

4. Kite Characteristics

Air channel, conical section, flexible wing, inflatable, lighter-than-air, non-rigid, ram-air, rudder, semi-rigid, 2,3,4,5,6-stick.

5. Other

Construction, control bar, cord winder, drogue, handcontroller, kite-reel, line-traveler, spinner, struts, tail, windsock.



A Rotor kite in flight.

First Reference

The following refers to the Emperor Wu, who founded the Liang dynasty of China in 502 A.D.:

"In 1449, when his enemies besieged Jiankang (now Nanking), Wu sent a kite aloft to inform allies outside the city of his plight. The ploy, which resulted in the earliest written reference to what was apparently a Chinese invention—the kite—failed to save the city or Emperor Wu, who was imprisoned and left to starve to death in his palace."

From *Empires Beseiged: AD 200-600*, Time-Life Books, 1988.

The first kite was flown a billion years ago. Don't you remember?

-Scots saying

Indigenous African Kites: Could It Be?

The common wisdom is that kites were unknown in black Africa, that is in the vast region south of the Sahara desert, until introduced some hundreds of years ago by occupying European colonial powers.

The wisdom seems to be that kites were unknown too in the northern rim of Africa, mostly Moslem countries stretching from Algeria to Egypt, until introduced hundreds of years ago from the Middle East, where they may have arrived from India.

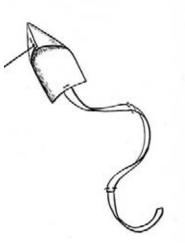
There are other possibilities, of course. Marco Polo brought back the concept of kites and kiteflying from China and the idea itself, rather than the kites, might have spread south as a consequence of his writing.

One can go no further than conjecture, since there is basically a literary void on kites in Africa, either for the Moslem or black regions of the vast continent.

A turn of the last century book called *Jouets a Vent* (Wind Toys) by Andre Thiebault, reissued in Paris in 1948, however, raises a piquant point. It shows Algerian kites so extremely simple it suggests they might just well be indigenous, that is, invented in Africa, rather than imported. Or the idea of the kite may have been imported, with the kites shown then having been developed by natives; in that sense they could be considered indigenous.

The point was raised when the Drachen Foundation hired a young woman, Rebekah Pape, to put into order, for archival purposes, its large quantity of French language kite material. She was instructed to translate to English some of the more interesting material she came across, and thus the Theibault material surfaced.

To begin his book of kite plans, Thiebault has a section titled "Confidence Building Models." Thiebault presents a paper kite he calls *Le Capuchin*, titled thus "because the silhouette reminds the viewer of a Capuchin monk." It also looks like a grasshopper, he adds. Commenting that the kite is in vogue with the children of Algeria, the author says: "One cannot dream of a more simple manufacturing process. It is sufficient to curl it at the middle into a cone. The kite is assembled by means of a long thorn, twig, or pin. This also serves as the point of attachment



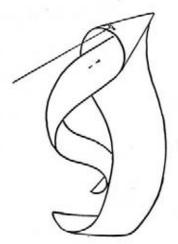
for the retaining line. Nothing remains to complete the kite except a tail made from strips of paper pinned end to end."

A glance at a rendering of the kite from the book makes the above description quite clear.

Capuchin Monk

A second kite is even simpler. Thiebault re-

produces a drawing of a kite called *Le Hennin de la Fee du Vent* (The Bonnet of the Wind Fairy), and comments "it differs little from the first kite except that its construction is even easier since it is made of one single long band of paper, of which one side is curved into a cone and held in place by a pin.



Bonnet of the Wind Fairy

One other pin serves to fix the string by which one flies the kite."

Size, flying qualities and other important considerations are not discussed for the kites.

Do these simple kites suggest a prefiguring of the sophisticated 20th century inventions

of Robert Allison, Francis Rogallo, and Domina Jalbert? They will to some people.

Letters to the Editor

'Thankful for What We Had'

Greetings Drachen,

Scott Skinner's explanation for moving the Drachen Journal to the Internet, "A Word to Our Readers" (issue No. 8), is clear and logical, but I don't think will eliminate a feeling among serious kiting enthusiasts that a top-notch magazine is vanishing into the great beyond. Nonetheless, we should be grateful and thankful for what we have had.

York

To Drachen,

We'll all miss Kite Lines (issue No. 8). Couldn't help but feel it was a eulogy delivered among a crowd of mourners. We'll also miss the paper version of the Drachen Journal now that it is converting to a costeffective online version. There's nothing like paper... and bamboo...and string to set the soul free.

George Peters, Boulder, Colo-

Ed Grauel, Rochester, New

rado

The Reason for the Taliban Ban

Dear Ali Fujino,

Jerry Seinfeld was addressing a group of people affected by the Twin Towers collapse and made some jokes about the now defunct Taliban regime. "My favorite thing about the Taliban is the law against kite flying," he said. "Kite flying is illegal in Afghanistan. I don't know why; probably they're afraid they'll discover electricity."

com

Tom Taggart, ttaggart@juno.

Words of Praise

Dear Drachen,

My sincere good wishes to the whole of the Drachen team. It is my ambition to one day be able to visit the foundation and take part in a seminar or workshop. Your journal is for me often inspirational, fueled by my obsession for all things kite-related. I feel that my batteries are recharged after reading it.

Harry Peart, Darlington, Durham,

U.K.

Chile Is Heard From

Dear Drachen Foundation,

Kites in Chile are flown around Sept. 18 (national independence day). These are flat, diamond-shaped kites made with *papel de volantin* and two bamboo sticks—one straight from tip to bottom and one curved from side to side. The poorer children fly a simpler *cambucha*, made with folded newspaper and no sticks. Fighter kites are also popular, fitting the description of Indian fighter kites. The strings are glued with powered lightbulb glass. I recall a book on kitemaking by Quimantu, the people's publishing house during Chile's socialist government in the early '70s. It included interviews with old kitemakers and their tradition. It was beautiful.

Alex Stuparich, stupar@interlog.

com

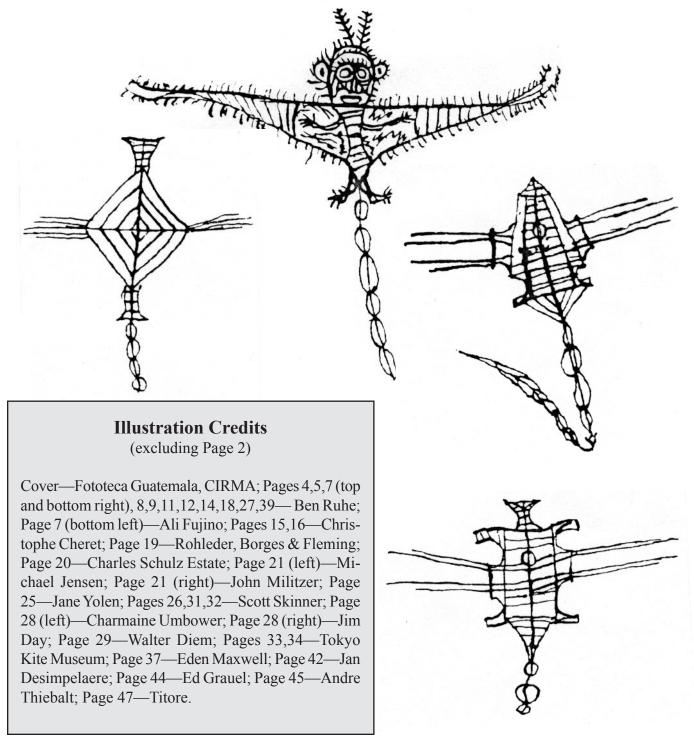
Making an Eddy Kite

Dear Drachen,

Thankyouthankyou. Just wanted to let you know I made a half-scale version of the Eddy kite (issue No. 8). I did change some of the dimensions, but it's still tailless. So far it flies not too bad. I make all my kites now for personal use, but this is my first single line. I do my flying at Clover Point in Victoria, B.C., a man-made peninsula used by the military during World War 11 for target practice. It's a great hangout for kite fliers, who sometimes use kites to ski at pretty good speeds on the grass. Hang gliders soar back and forth. Wind surfers taxi back and forth in the cold waters. Since the wind shoots up from the cliffs, there are sometimes hundreds of kites being flown at one time. We have a beautiful view of the Olympic Mountains, looking across Juan de Fuca Strait.

Maori Drawings From 1818

Maori in pre-European times were renowned for their 10-foot wing span bird kites, but the New Zealand Polynesians constructed and flew handsome kites in many other shapes as well. Illustrated here from the Auckland Public Library are kites drawn by a young Maori chief named Titore on a visit to London in 1818. The kites are unidentified, although the one with human face seems to be a variant bird kite. Kites were built from sticks bound with flax fibers. Bark cloth formed the covering. The horns projecting from the head of the manu or bird kite are probably plant stalks decorated with feathers. Tails to give the kites stability were often constructed by tying clusters of feathers to cords.



Lightness of the Sky, Gravity of the Earth

Kitefliers are loath to admit that kites do not stay in blue skies, suspended forever. They are concerned as well: that these fragile creatures may not survive the fall from the great heights they have attained.

The kite has about it the suggestion, a sign we might say, of the life force: innocence and optimism, a focus on the moment at hand, accompanied by a sense of comfort that life beneath a kite flying silhouetted against the canvas of blue sky, in that moment, is free of pain and rage. It is a feeling long associated with kites, implying a child's world of innocence, true, but however small this kernel of innocence carried forward into adulthood, for kitefliers it is a moment of grace, the world at peace with itself.

—Tal Streeter